

Building 2 Reuse Guidelines

Draft Report

Moffett Federal Air Field, California

.....



prepared for:

NASA/Ames Research Center

U.S. Naval Air Station Moffett Field

prepared by:

Architectural Resources Group

Architects, Planners & Conservators, Inc.
San Francisco, California

January 2004

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

Table of Contents

Introduction.....	1
I. Executive Summary	1
II. Methodology	2
III. Building Summary	4
IV. Historical Background and Site Context	5
V. Building Description	6
VI. Character-Defining Features	8
VII. Opportunities for Reuse	9
VIII. Code Evaluations and Recommendations	10
A. Fire/Life Safety	
B. Disabled Accessibility	
C. Energy Conservation	
IX. Future Studies Needed	15
A. Hazardous Materials	
B. Mechanical and Electrical Systems	
C. Structural Systems	
Appendix 1. Character-Defining Features	
Appendix 2. Existing Configuration Floor Plan	
Appendix 3. Historic Aerial Photographs	
Appendix 4. Current Conditions Photographs (2003)	
Appendix 5. Construction Plans	
Appendix 6. NRHP Moffett Field District Nomination	

U.S. Naval Air Station Moffett Field Building 2 Reuse Guidelines

Introduction

NASA/Ames Research Center contracted with Architectural Resources Group, Architects, Planners & Conservators, Inc. (ARG) to develop Reuse Guidelines for the Balloon Hangar, Building 2, at the U.S. Naval Station at Moffett Federal Air Field, California. This report is one of a series prepared for many of the historic buildings at the site. The Reuse Guidelines have been designed to assist NASA/Ames professional staff, tenants, and their consultants in rehabilitating structures on the historic Navy base by identifying character-defining features, outlining the opportunities for reuse and evaluating code deficiencies.

I. Executive Summary

The Naval Air Station Sunnyvale, California (the historic name of the base) was listed on the National Register of Historic Places (NRHP) as a district in 1994. Building 2 is a contributor to the district and retains a high degree of integrity. The building was constructed in 1933, a small one-story wing was built on the west elevation in 1943, and a one-story wing was added to the eastern side in 1945. Sometime after the 1945 remodel, the building was converted into a gymnasium. A wood gym floor was installed in the main large open high bay space, which once housed balloons.

Building 2 has a high degree of integrity; the building's character-defining features are intact on the exterior and interior. The massive central space, which once served as the dirigible hangar, has been maintained as an open volume. The main alteration to the central space, the installation of a wood gymnasium floor, has not changed the character of this important interior space.

Rehabilitation of the building should comply with *The Secretary of the Interior's Standards for Rehabilitation*. Plans for the reuse of Building 2 should take into consideration the preservation of the building's character-defining and contributing features, including, but not limited to, the overall form of the building, fenestration pattern, materials, and central open interior space. Changes to noncharacter-defining features may be undertaken, but the impact to the character-defining and contributing features should be carefully evaluated. The building's continued use as a gymnasium is appropriate.

Future renovations will require Fire/Life Safety and Disabled Accessibility upgrades to comply with current codes. These include, but are not limited to, the addition of fire sprinklers, exit path of travel and exit door upgrades, and disabled access improvements to door and door hardware, restrooms, and locker rooms. The impact of these upgrades to the character-defining and contributing features should be carefully evaluated.

Further analysis is required for the management of hazardous materials and upgrades to the mechanical, electrical and structural systems. Existing mechanical flues, ducts and conduits protruding from windows and exposed on the exterior should be removed. The impact of these upgrades to the character-defining and contributing features should also be carefully evaluated.

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

II. Methodology

ARG staff conducted a site inspection of Building 2 in November 2003. During the site visit notes were taken on the character-defining features of the building and photographic documentation was completed on the exterior as well as major interior spaces.

ARG staff reviewed both primary and secondary research materials at a number of institutions including:

- 1950 Navy Docks & Yards Micro Film;
- Engineering Documentation Center; and
- Ames Imaging Library.

The following documents were utilized as the main sources of information:

- The 1994 National Register of Historic Places Nomination Form for the US Naval Air Station Moffett Field Central Historic District;
- Aerial photographs dating from 1931 through 1944;
- Architectural Drawings including:
 - o Navy Department, Bureau of Yards & Docks. "U.S. Naval Air Station, Sunnyvale, Calif., Balloon Hangar." Drawings 5 January 1933;
 - o U.S. Naval Air Station, Moffett Field California. "Building No 2: Add & Alt to Locker & Shower Rms." Drawings 29 August 1945;
 - o Department of the Navy, Bureau of Yards & Docks. "Bldg 2 Intercommunication and Telephone." Drawings 17 November 1953;
 - o Naval Air Station, Moffett Field, California. "Locker/Exercise Room, Bldg 2." Drawings 16 September 1982;
 - o N.A.S. Moffett Field – Mt. View, Cal. "For Gymnasium Bldg. No. 2, Basketball Scoreboard Mounting Brackets." Drawings 28 October 1982; and
 - o CAD Floor Plans to the Existing Conditions dated December 2001.

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

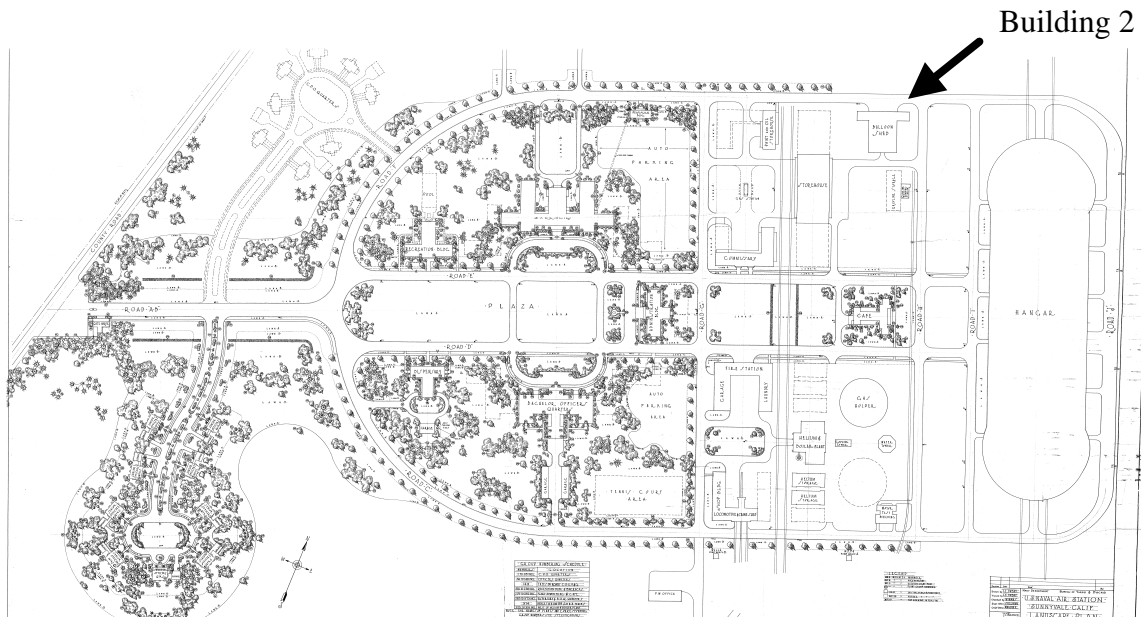


View of the East and South Elevations of Building 2.

III. Building 2 Summary

Location:	Bushnell Road and Severyns Avenue
Area:	US Naval Air Station Moffett Field - Central Historic District
Date of Construction:	1933
Historic Structure:	Yes
Historic Use:	Balloon Hangar
Current Use:	Vacant (formerly a gymnasium)
Hazard Level:	Ordinary
Number of Floors:	Main section is one tall story; additions are one story
1st Floor:	18,206 sq. ft.
Balcony:	1,300 sq. ft.
Total:	19,506 sq. ft.
Exterior Materials:	Cement stucco on main building and eastern addition and horizontal, wood siding on western addition.
Construction Frame:	Main building has poured-in-place, reinforced concrete walls, beams, and roof. Eastern and western additions are wood frame.

U.S. Naval Air Station Moffett Field Building 2 Reuse Guidelines



“U.S. Naval Air Station, Sunnyvale, Calif., Landscape Plan.” 29 April 1933.

IV. Historical Background and Site Context

The Naval Air Station Sunnyvale, California was commissioned on April 12, 1932. The station was one of two bases constructed to port the Navy’s two large airships (dirigibles); the other airship, the U.S.S. Akron, was housed at the Naval Air Station in Lakehurst, New Jersey. The dirigibles were part of a domestic security program designed by Admiral William A. Moffett. Airships were capable of staying airborne for much longer periods of time than airplanes and were considered ideal for conducting reconnaissance of the nation’s coastlines.

The 1933 station was defined by perimeter roads: Wescot Road to the north and west, Bushnell Road to the south and west, and Sayre Avenue to the east. The base was arranged in a formal and hierarchical arrangement typical of American military base design. McCord Avenue, which runs north/south, divided the base into halves; the administration functions were located to the west and the industrial functions, including the massive dirigible hangar, were positioned to east. The western section, including the Administration Building (Building 17), Dispensary (Building 23), Bachelor Officer’s Quarters (Building 20), Recreation Building (Building 25), and office building (Building 19) were arranged around a central axis, Shenandoah Plaza. The buildings in the eastern, industrial section, such as the enormous Hangar 1 (the dirigible hangar) and Building 2, were placed in a grid with very little green space or relationship between the buildings. All of the buildings within the original base, with the exception of Hangar 1, were constructed in the Spanish Colonial Revival Style.

Plans for the Balloon Hangar, Building 2, were approved January 5, 1933. The building was constructed later that year on the corner of Bushnell Road and Severyns Avenue near Hangar 1. Building 2 faced north, away from the other structures of the base. This orientation likely provided more maneuvering room for moving balloons in and out of the building to and from the

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

surrounding landing fields. The building was a large reinforced-concrete structure. Like the other buildings constructed as part of the 1933 construction campaign, Building 2 has elements of the Spanish Colonial Revival Style including stucco finish, shaped parapet, and stringcourses.

When constructed the Balloon Hangar had a “T”-shaped footprint. The wide stem functioned as the hangar, while the wings at the top of the “T” provided space for the large doors to open and close. In addition, in the east wing there was a “Mens Toilet” and an “Officers Toilet.” A room in the west wing was used for “Storage.” Concrete stairs in the wings led to open balconies above the first floor rooms.

Plans for alterations to the building dated 1945 indicate the main central space was still used as a “Balloon Hangar.” By this time the one-story addition that currently fills the eastern ell of the “T” had been constructed. The walls of the eastern addition were wood-frame covered with white cement stucco on the exterior and metal lath and plaster on the interior. The addition included Locker Rooms, “Shower Rooms,” a “Sun Lamp Room,” and a “Massage Room.” By 1943 the small, one-story, western addition had been constructed.

The building was converted into a gymnasium at some point after 1945. Plans show that by 1983 the floor plans of the main building and additions were very similar to existing room arrangements. The second-floor additions in the balconies of the door wings had been enclosed as a squash court. The racquetball court building (Building #480) had been constructed southwest of Building 2.

The United States Naval Air Station Sunnyvale, California was listed as a district in the National Register of Historic Places (NRHP) in 1994. The Period of Significance for these structures is 1930–1935 and 1942–1946, which corresponds to the period of Navy occupation. Building 2 is a contributor to the district.

V. Building Description

Building 2 is a large, open high bay structure with an irregular-shaped footprint. The main building has reinforced-concrete walls covered with stucco on the exterior. Shaped parapets are located on the north and south faces of the building. Three rows of concrete stringcourses divided the walls above and below the windows. A stepped watertable surrounds the base of the building. Metal trusses support the flat, board-formed, reinforced concrete roof. All of the building’s windows are divided-light with steel sashes and frames, unless otherwise noted. Those openings above the first floor level have splayed surrounds.

Two massive sliding doors on the north façade open directly into the large open hangar space, the core of the building. Triangular panels indented in the stucco ornament the upper corners of the opening. The doors are composed of a steel framework with metal, panel sheathing. The doors slide on rails set in the floor of the building and are powered by engines attached to the base of each door. Large wings on either side of the main opening provide pockets for the doors. On the three exterior faces of each wing, there is a single window just above the watertable and a large vertical band of windows composed of four twelve-light windows. Above an intermediate stringcourse, there is a single six-light clerestory window.

U.S. Naval Air Station Moffett Field Building 2 Reuse Guidelines

On the west elevation of the main building, there are five bands of vertical windows. Four are composed of four, stacked, twenty-four light windows. The southernmost band is narrower and is fitted with four twelve-light windows. Five clerestory windows are located between the upper stringcourses and are aligned with the vertical bands. Four are twelve-light windows, but the southernmost window is narrower (like the vertical band of windows below) and is a six light. A three-part window is located at the first floor level below each of the vertical bands; the center window has six lights, and the outer each have three. On the first floor level of this elevation, there is a one-story wood-frame addition. The walls are sheathed in horizontal wood siding, and the roof is flat.

The south elevation is the simplest face of the building, but like the other elevations, the wall surface is divided by three stringcourses. Openings are limited to the first floor. In the center there is a pair of metal doors with divided-light glazing, which has been painted. Pairs of nine-light windows with operable lower sash flank the entrance. On the south elevation of the east addition, there are two small windows and a door.

The east elevation is very similar to the west elevation; there are five bands of vertical windows with clerestory windows above. However, the first floor level is obscured by the east addition. The walls of the addition are wood-frame covered with stucco on the exterior. A stepped watertable, similar to that on the main building, rings the walls below sill level. The roof is flat, and its covering is not visible. In the center of the addition's east wall, there is a recessed entrance consisting of a glazed door, sidelight, and transom. On either side of the entrance, there is a single window and three pairs of windows. There is an additional window at the north end of this elevation. All of the windows are aluminum two-light windows with awning sash in the upper half. The plans for the addition show divided-light windows; these were likely replaced with the current windows in the 1980s.

The bulk of the building consists of a massive, central gymnasium space, which once served as a balloon hangar and practice space. The walls are unfinished concrete, and reinforcing rods, electrical conduits, the structural system of the door, and the roof trusswork are all exposed. A raised gymnasium wood floor has been installed. In the door wings there are single rooms. Several historic wood panel doors are located in these sections. Original concrete stairways lead to second floor balconies, which have been enclosed with wood-frame partitions. The windows in the new enclosures are modern with aluminum frames, and the doors are wood with glazing. The eastern first floor room leads to the eastern addition, which includes, storage space, boiler room, men's restroom, men's locker room (including sauna), entrance hall, office, women's gym, and women's locker room.

Building 480, the racquetball court, is located at the southwest corner of Building 2. It is a rectangular-shaped, wood-frame structure clad in plywood panels. A gabled roof covered with corrugated metal panels tops the building, and exposed rafter ends are visible along the eaves. The north and south elevations have no openings. The east and west elevations each have small wood doors and large wood vents in the gable ends.

VI. Character-Defining Features

The building's original use as a Balloon Hangar should be further researched in order to more clearly understand the functions of the spaces and undertake a rehabilitation that is sensitive to the original design. The building's exterior and interior have been surveyed and evaluated for significant features and spaces, which have been categorized into levels of descending importance: significant, contributing, tertiary, and non-contributing (see Historic Significance Plans in Appendix). In planning the building's rehabilitation, the significant and contributing character-defining features should be retained whenever feasible.

1. Significant Character-Defining Features: these are the features that convey the building's historic character and significance. Alteration or removal of these features could result in a loss of integrity and should be avoided.

The following are significant features:

- Overall form—large, central block with door wings and one-story eastern addition;
- Stucco-covered reinforced concrete walls;
- Shaped parapets on the north and south elevations;
- Stringcourses;
- Stepped watertable;
- Massive steel-frame and metal panel sliding doors at north elevation;
- Vertical bands of windows on east, west, and all wing elevations;
- Clerestory windows;
- Tripled windows on the first floor;
- Divided-light windows with metal frames and sashes;
- Metal doors with glazed divided lights;
- Interior space: large, open, central space with exposed trusses;
- Concrete stairways in door wings;
- Original interior panel wood doors; and
- Original lighting fixtures.

2. Contributing Features: these features are important elements that contribute to the understanding of the original design. Alteration or removal of these features may be necessary for programmatic or building system requirements. However, removal should be minimized and where necessary mitigated.

The following are contributing features:

- Wood-frame addition c. 1945 on the west elevation.

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

- Wood framed addition c.1943 on the east elevation

3. Tertiary Features: these features are original elements of the building that are of a lower importance relative to the understanding of the original design. Alteration or removal of these features, if necessary, would have a limited affect on the integrity of the building.

There are no tertiary features.

4. Non-Contributing Features: these features are elements of the building that have been remodeled or areas where additional alteration would not affect the original integrity of the building. In some cases, removal of the non-contributing features may be beneficial to the historic integrity of the building.

The following are non-contributing features:

- Second-story additions in door wings;
- Aluminum windows in east addition;
- Recently applied interior finishes including:
 - Wood gymnasium floor.
- Building 480 – Racquetball Court.

5. Conservation of Intact Historic Fabric

The following materials require special care and treatment in their maintenance and rehabilitation:

- Integral color stucco;
- Original window and glazing;
- Massive steel-frame and metal panel sliding door.

VII. Opportunities for Reuse

Any alterations to the significant character-defining features should be approached carefully and sensitively following *The Secretary of the Interior's Standards for Rehabilitation (The Standards)*. *The Standards* define rehabilitation as “the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.” Alteration of significant character-defining features will require consultation with the California Office of Historic Preservation.

The spatial relationships of the buildings are significant to the historic character of the district. Although Building 2 is located in the industrial section of the base away from Shenandoah Plaza, its setting is important to its integrity as well as that of the surrounding historic structures. Maintaining the relationships of the buildings and setting is important to protecting the eligibility of the Naval Air Station Sunnyvale Historic District to the NRHP.

Building 480, the racquetball court, is non-contributing, was constructed after period of significance for the district, and could be removed.

Building 2 retains a high degree of integrity. The seven aspects of integrity as defined by the NRHP: location, design, setting, materials, workmanship, feeling, and association, are all intact. The eastern addition was constructed c. 1945 during the period of significance. The western addition was constructed by 1943 and may have been built during the period of significance. Further research should be undertaken to better understand the historical use for the building.

The building's continued use as a gymnasium is appropriate. Reuse of the building could be accomplished with a few alterations as outlined in Section VIII, below.

Restoration of the historic exterior color scheme is recommended as a long-term goal for the district, along with the other buildings in the district, which are all an integral-colored stucco. This original finish has been painted many times. As it is not known what the original color scheme was, a complete analysis should be performed on the integrally-colored stucco and other exterior components. Consideration should be given to removing paint and restoring the original integrally-colored stucco finish.

VIII. Code Evaluations and Recommendations

A. Fire/Life Safety

Description

Building 2 is composed of a massive open central space with two-story additions built in the door wings, and one-story additions. The building does not have a fire sprinkler system. The building has a gross floor area of 19,506 square feet and consists of concrete slab, concrete exterior walls, steel truss roof, and wood framed additions. The building was reviewed for general code compliance with the provisions of the 2001 California Building Code (CBC).

The building is currently classified as A2.1 occupancy and Type III-N construction for the original building and V-N for the additions. The following review is based on the same occupancy. If a change in occupancy or mixed occupancies is proposed, further detailed code analysis will be required.

California's State Historical Building Code (SHBC) shall be used in conjunction with the California Building Code as stated in section 8-102.1: "These regulations are applicable for all issues regarding building code compliance for qualified historical buildings or properties. These regulations are to be used in conjunction with the regular code to provide alternatives to the regular code to facilitate the preservation of qualified historical buildings or properties. These regulations shall be used whenever compliance with the regular code is required for qualified historical buildings or properties."

Requirements

- 1. Construction type:* The building is currently classified as A2.1 occupancy and Type III-N construction for the original building and V-N for the additions. Table 5-A of the CBC does not allow Occupancy A2.1 to be construction type III-N or V-N. Section 508 of the CBC allows an approved automatic sprinkler system to be substituted for one-hour fire resistive construction.
- 2. Location on Property:* Table 5-A of the CBC requires openings less than 20 feet from property line to be protected. Building 420 is currently less than 10 feet away and the openings in the exterior wall between building 2 and 420 are unprotected.
- 3. Allowable Area:* Table 5-B of the CBC limits the area to 13,500 sf for construction type III-1hr and 10,500 sf for the construction type V-N. Per CBC section 601.2 the area of the entire building shall not exceed the least area permitted. Per section 505.1.2 of the CBC, for buildings with separations on three sides, the allowable area can be increased by 2.5% for each foot of separation. The allowable area is therefore increased to 21,000 square feet. Currently the area of entire building is 19,506 square feet.
- 4. Allowable Height:* Table 5-B of the CBC limits the number of stories of the building to 2 stories and an overall height of 65 feet for Construction Type III-1hr and 50 feet for Construction Type V-1hr. Currently, the main structure is 70 feet. SHBC section 8-302.5 allows the height of the structure to not be limited, “provided such height or number of stories does not exceed that of its designated historical design.”
- 5. Means of Egress Identification:* Section 1003.2.8.2 requires the path of travel to and within exits to be identified with code compliant exit signs. No exit signs exist.
- 6. Doors:* Section 1003.3.1.3 of the CBC requires a clear opening of 32 inches. Section 1003.3.1.5 requires the door to swing in the direction of egress. Section 1003.3.1.6.2 requires a level landing on each side of all doors that are part of the means of egress system. This section also requires the landing to be 44” in length when the door swings away and 60” in the direction of door swing. Currently, the all of the exits from the main space have ramps directly to the doors with out landings, and numerous interior doors do not have 32” clear dimension. SHBC section 8_603.2 allows certain doors to have a clear dimension as narrow as 30”.
- 7. Stairs and Guardrails:* CBC section 1003.3.3.3 requires the rise and run of the stair to be a minimum of 7” and 11” respectively. CBC section 1003.3.3.6.1 requires all stairs (two or more risers) to have a handrail on each side. Currently, the existing interior concrete stairs leading to second floor balconies do not have code compliant rise and run or compliant handrails. Section 509 of the CBC requires guardrails at all unenclosed floor or roof openings, open or glazed stairways, aisles, landings, ramps, balconies, or porches, which are over 30” above grade or the floor below. Currently the stairs and landings do not have code compliant guardrails. SHBC section 8-502.1 exception 5 allows the enforcing agent to accept “any other condition which will allow or provide for the ability to quickly and safely evacuate any portion a building with out undue exposure and which will meet the intended exiting and life safety stipulated by these regulations.”

8. Ramps: Section 1003.3.4.3 of the CBC requires ramps to have a slope no greater than 1:12. Section 1003.3.4.4 of the CBC requires ramps to have code compliant landings at the top and bottom of the runs. Currently none of the existing ramps meet the slope or landing requirement. The gymnasium floor is about 6" above the original concrete floor.

9. Exiting: Section 1004.2.3.4 of the CBC requires the gymnasium to have three exits. Section 1004.2.2 of the CBC states that one of these exits can be through an intervening room while the remaining exits must access an exit directly or a corridor that provides direct access to an exit. Section 1007.2.1 of the CBC requires Type A2.1 Occupancies to have a main exit sufficient width to accommodate one half of the total occupant load. Section 1007.2.2 of the CBC requires Type A2.1 Occupancies to have exits on each side sufficient width to accommodate one third of the total occupant load. This section also requires the side exits to open directly to a public way or into an exit or exit discharge. Section 1007.2.5 of the CBC requires exits and exit access doors serving Type A Occupancies to have panic hardware. Section 1007.2.6 of the CBC requires Type A occupancies to have a code compliant sign indicating the room capacity posted near the main exit.

Recommendations

- 1. Construction type:* Provide an approved automatic sprinkler system.
- 2. Location on Property:* Provide protection at the window and door openings in each building or remove Building 420.
- 3. Allowable Area:* Building 2 is currently within the allowable area.
- 4. Allowable Height:* Per SBHC the building is within the allowable height.
- 5. Means of Egress Identification:* Provide code compliant exit signs.
- 6. Doors:* Convert the existing doors on the path of travel to swing out in the direction of egress. Provide 32" clear at all doors (offset hinges) where possible and evaluate the doors that need to be 30". Provide code compliant level landing at all doors along the path of travel.
- 7. Stairs and Guardrail:* Alteration of the stairs to the balconies would have significant impact on the character of this space. Negotiate with the enforcing agency to mitigate this requirement, or limit the occupancy of the balconies to storage.
- 8. Ramps:* Reconfigure the existing ramps to meet the code requirements for slope and landings. Provide compliant ramp up to the gymnasium floor level.
- 9. Exiting:* Provide code compliant signage indicating the room capacity. Provide code compliant exiting for the 2 side exits. Provide panic hardware on exit doors.

B. Disabled Accessibility

Requirements

1. Accessible Parking: CBC section 1129B.1 requires that where parking is provided for the public as clients, guests, or employees' accessible parking will also be provided. Section 1129B.4 requires one van accessible space for every eight spaces. Currently there are no accessible parking spaces provided.

2. Accessible Route: Section 1114B.1.2 requires an accessible route of travel to all portions of the building that are required to be accessible. Currently there is no code compliant accessible path of travel through the first floor of the building, and the balconies are not accessible. Because of the small floor area of the balconies, providing access by means of a new elevator would significantly impact the historical character of the gymnasium. The SHBC Section 8-604 allows for equivalent facilitation to be provided in lieu of a path of travel to all areas of the building where providing access "would threaten or destroy the historical significance or character-defining features of the building or site or cause unreasonable hardship."

3. Exits: Section 1114B.2.1 of the CBC states that all required exits shall be accessible. If they are not, an area of evacuation must be provided. The interior stair is currently the sole means of egress from the balcony areas. SHBC section 8-605 allows for "equal services provided for the public in a location fully accessible to and usable by persons with disabilities..."

4. Doors: Section 1133B.2.4 of the CBC requires a level landing on each side of a door. Section 1133B.2.4.2 requires maneuvering clearance to be 60" on the swing side of interior doors and 48" on the non-swing side of the door with a closer (44" without closer). The clearance on the swing side shall extend 18" beyond the strike side of the door for interior doors and 24" on exterior doors. The clearance for the non-swing side shall extend 12" when the door has a closer. Section 1133B.2.5.2 requires hardware that is hand operable with a single effort without requiring the ability to grasp. Currently all of the doors from the gymnasium do not have level landings. Some of the interior doors do not have the required maneuvering clearances. None of the door hardware is code compliant.

5. Stairs: See the stair and guardrail section under Fire Rating/Life Safety Evaluation. Section 1133B.4.4 of the CBC requires striping for the visually impaired on the lowest and upper most tread of a run of stairs. Currently there is no striping on the interior stairs.

6. Restrooms/locker rooms: Section 1115B.1 requires buildings which are required to be accessible to have accessible restrooms and lockers. Currently the building does not have code compliant accessible restrooms and lockers.

7. Seating: Section 1104B.3.1 of the CBC requires accessible seating be provided where seating is provided. The current seating does meet the code requirements for accessible seating.

8. Signage: Section 1127B.3, 1129B.5, and 1115B.5 of the CBC require code-compliant signage identifying accessible entrances, parking, and restrooms.

Recommendations

- 1. Accessible Parking:* provide code-compliant, accessible parking.
- 2. Accessible Route:* As stated in “Fire Rating/ Life Safety Evaluation” recommendations, reconfigure the ramps from the gymnasium to meet the code requirements for slope and landing. Provide accessible ramps up to the gymnasium floor. Provide equivalent facilitation for any service provided in balconies, or limit the use of the balconies to storage.
- 3. Exits:* Provide equivalent facilitation for any service provided in balconies, or limit the use of the balconies to storage.
- 4. Doors:* As stated above under “Fire Rating/Life Safety Evaluation” recommendations, code-compliant, level landings should be provided at the doors from the gymnasium. The doors throughout the building should be altered to swing in the direction of egress. Provide 32” clear at all non-compliant doors, where possible. Where not possible, evaluate the doors that are 30”. All doors should have code-compliant hardware.
- 5. Stairs:* Provide code-compliant striping for the visually impaired at the lowest and uppermost treads of each run of interior stairs.
- 6. Restrooms/locker rooms:* Provide code compliant accessible toilets and lockers.
- 7. Seating:* Designate an area for accessible seating.
- 8. Signage:* Provide code compliant signage.

C. Energy Conservation

Description

The historic structure was designed with some energy-conserving features; monolithic terrazzo floors throughout the building and thick concrete walls contribute to passive climate control for the building.

Recommendations

As an historic building, Building 2 is exempt from energy code requirements. However, measures to reduce energy consumption and provide for user comfort are recommended. These actions may include insulating the ceiling and exterior walls during construction. The existing steel, sash windows are historic features and should be repaired and weather-stripped rather than replaced.

IX. Future Studies Needed

A. Hazardous Materials

Although a hazardous materials report has not yet been completed, signs posted around the building indicate several types of historic material and finishes are known to contain asbestos and other hazardous materials exist in the building.

It is recommended that a complete hazardous materials report be completed on the building.

B. Mechanical and Electrical Systems

The mechanical and electrical systems were not inspected as part of this report. It is assumed that the rehabilitation and reuse of Building 2 will entail the installation of new mechanical and electrical systems, with the exception of the plumbing drainage/waste system.

Existing mechanical flues, ducts and conduits protruding from windows and exposed on the exterior should be removed. All new mechanical and electrical systems should be designed to preserve the character of the significant materials and spaces identified in this report.

C. Structural Systems

The exterior walls of Building 2 are reinforced concrete with a stucco finish coat. The roof/ceiling are steel trusses and purlins and wood decking.

The building appears to be in excellent condition. In the course of rehabilitating the building the structural system should be analyzed for seismic and gravity load deficiencies and reinforced as necessary. Strengthening provisions should be designed to preserve significant materials and spaces.

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

United States Naval Air Station
Sunnyvale, California Historic District
Building 2 Reuse Guidelines
Moffett Federal Air Field

Appendix 1. Character-Defining Features

Shenandoah Plaza Historic District
Building 2

Character-Defining Features			
January 2004			
Elements	Significance	Condition	Comments
Exterior			
North Elevation	S	G	
Stepped Water Table Base Course	S	G	swallows nest in corner of windows
Stucco Finish	S	G	
Projecting Middle Belt Course	S	G	
Massive Steel-frame and Metal Panel Sliding Doors	S	G	
Windows			
Metal sash windows	S	F	
Beveled jamb	C	G	
Triagle revel at upper corner of door opening	C	G	
Decorative shaped parapet profile	S	G	
East Wing- East Elevation	S	G	
Stepped Water Table Base Course	S	G	swallows nest in corner of windows sheet metal vents through window sash
Stucco Finish	S	G	
Projecting Middle Belt Course	S	G	
Windows			
Metal sash windows	S	F	
Beveled jamb	C	G	
Decorative shaped parapet profile	S	G	
Sheet metal vent	NC		
East Wing - South Elevation	S	G	
Stepped Water Table Base Course	S	G	swallows nest in corner of windows
Stucco Finish	S	G	
Projecting Middle Belt Course	S	G	
Windows			
Metal sash windows	S	F	
Beveled jamb	C	G	
Antenna	NC		
East Elevation	S	G	
Original 1935 structure			swallows nest in corner of windows sheet metal vents through window sash
Stepped Water Table Base Course	S	G	
stucco Finish	S	G	
Projecting Middle Belt Course	S	G	
Projecting Upper Belt Course	S	G	
Windows			
Metal sash windows	S	F	
Beveled jamb	C	G	
Collection boxes and Downspouts	C	G	
Sheet Metal Vent (3)	NC		
Addition	C	F	
Watertable	C	G	
Stucco Finish	C	G	
Copper Collection boxes and Downspouts	C	F	

Significance Rating:

S=Significant
C=Contributing
T=Tertiary
N=Non-contributing

Condition Rating:

G=Good
F=Fair
P=Poor

Shenandoah Plaza Historic District
Building 2

Character-Defining Features			
January 2004			
Elements	Significance	Condition	Comments
South Elevation	S	G	
Original 1935 Structure			
Stepped Water Table Base Course	S	G	
stucco Finish	S	G	
Projecting, Flat Surfaced Middle Belt Course decorative returned	S	G	
Projecting, Flat Surfaced Upper Belt Course decorative returned	S	G	
Decorative shaped parapet profile	S	G	
Windows			
Metal sash windows	S	F	Window sash painted over
Doors			
Metal frame and door	S	F	
East Addition			
Water table	C	G	
Stucco Finish	C	G	
West Elevation	S		
Original 1935 structure			
Stepped Water Table Base Course	S	G	
stucco Finish	S	G	
Projecting Middle Belt Course	S	G	
Projecting Upper Belt Course	S	G	
Windows			
Metal sash windows	S	F	swallows nest in corner of windows sheet metal vents through window sash window sash painted over
Beveled jamb	C	G	
Copper Collection boxes and Downspouts	C	F	
Sheet Metal Vent (3)	NC		
Addition			
wood siding	C	P	
West Wing - South Elevation	S	G	
Stepped Water Table Base Course	S	G	
Stucco Finish	S	G	
Projecting Middle Belt Course	S	G	
Windows			
Metal sash windows	S	F	swallows nest in corner of windows
Beveled jamb	C	G	
Metal ladder	NC		
Metal bars on first floor windows	NC		

Significance Rating:

S=Significant
C=Contributing
T=Tertiary
N=Non-contributing

Condition Rating:

G=Good
F=Fair
P=Poor

Shenandoah Plaza Historic District
Building 2

Character-Defining Features			
January 2004			
Elements	Significance	Condition	Comments
West Wing - West Elevation	S	G	
Stepped Water Table Base Course	S	G	swallows nest in corner of windows
Stucco Finish	S	G	
Projecting Middle Belt Course	S	G	
Windows			
Metal sash windows	S	G	
Beveled jamb	C	G	
Decorative shaped parapet profile	S	G	
Door frame and transom	C	F	
Door	NC		
Canopy Over Door	NC		
Interior			
Original 1935 Structure	S	G	
Main space			
Volume of Main Space	S	G	Paint at first floor level
Exposed Board formed walls	S	G	
Exposed steel bracing	S	G	
Large Metal Panel barn style doors	S	G	
Metal Double Door and frame	S	F	
Metal transom at existing doorways	C	F	
Windows			
Multi-lite Metal Sash: (1/3, 2/3, 1/3: upper 2 lites pivot operation)	S	F	
Multi -lite Metal Sash (4 sash of 6/4)	S	F	
Multi-lite Metal Sash (6/2: middle 2 lites awning operation)	S	F	
Finely ribbed glass (1/16" on center)	C	F	painted over throughout painted on west elevation
Operable sash hardware	C	G	
Exposed roof Trussing	S	G	
Lighting	C	F	
Wood flooring	NC		
Heaters	NC		
Basketball hoops	NC		
punching bag hangers	NC		
Wire Mesh over windows	NC		
East Wing			
First Floor			
exposed concrete ceiling	C	G	
interior walls configuration	T	F	
Windows			
Multi-lite Metal Sash (2/3: upper 2 lites pivot operation)	S	F	
Multi -lite Metal Sash (4 sash of 3/4)	S	F	
Multi-lite Metal Sash (3/2)	S	F	

Significance Rating:

S=Significant
C=Contributing
T=Tertiary
N=Non-contributing

Condition Rating:

G=Good
F=Fair
P=Poor

Shenandoah Plaza Historic District
Building 2

Character-Defining Features			
January 2004			
Elements	Significance	Condition	Comments
Flooring	NC		
Second Floor			
Aerobics Room	NC		
Stair	C	G	
West Wing			
First Floor			
Exposed Concrete Ceiling	C	G	
Carpet wainscot	NC		
Windows			
Multi-lite Metal Sash (2/3: upper 2 lites pivot operation)	S	F	
Multi -lite Metal Sash (4 sash of 3/4)	S	F	
Multi-lite Metal Sash (3/2)	S	F	
Exterior Door frame and transom	C	F	
Exterior Door	NC		
Rubber Flooring	NC		
Second Floor			
Weight Room	NC		
Stair	C	G	
East Addition	T	F	
Metal Door Frame and transom to 1935 structure	C	F	
Exposed decorative beams in main cooridor	C	G	
West Addition	T	P	
Metal Transom to 1935 structure	C	G	
Panel finish on ceiling and walls	T	G	

Significance Rating:

S=Significant
C=Contributing
T=Tertiary
N=Non-contributing

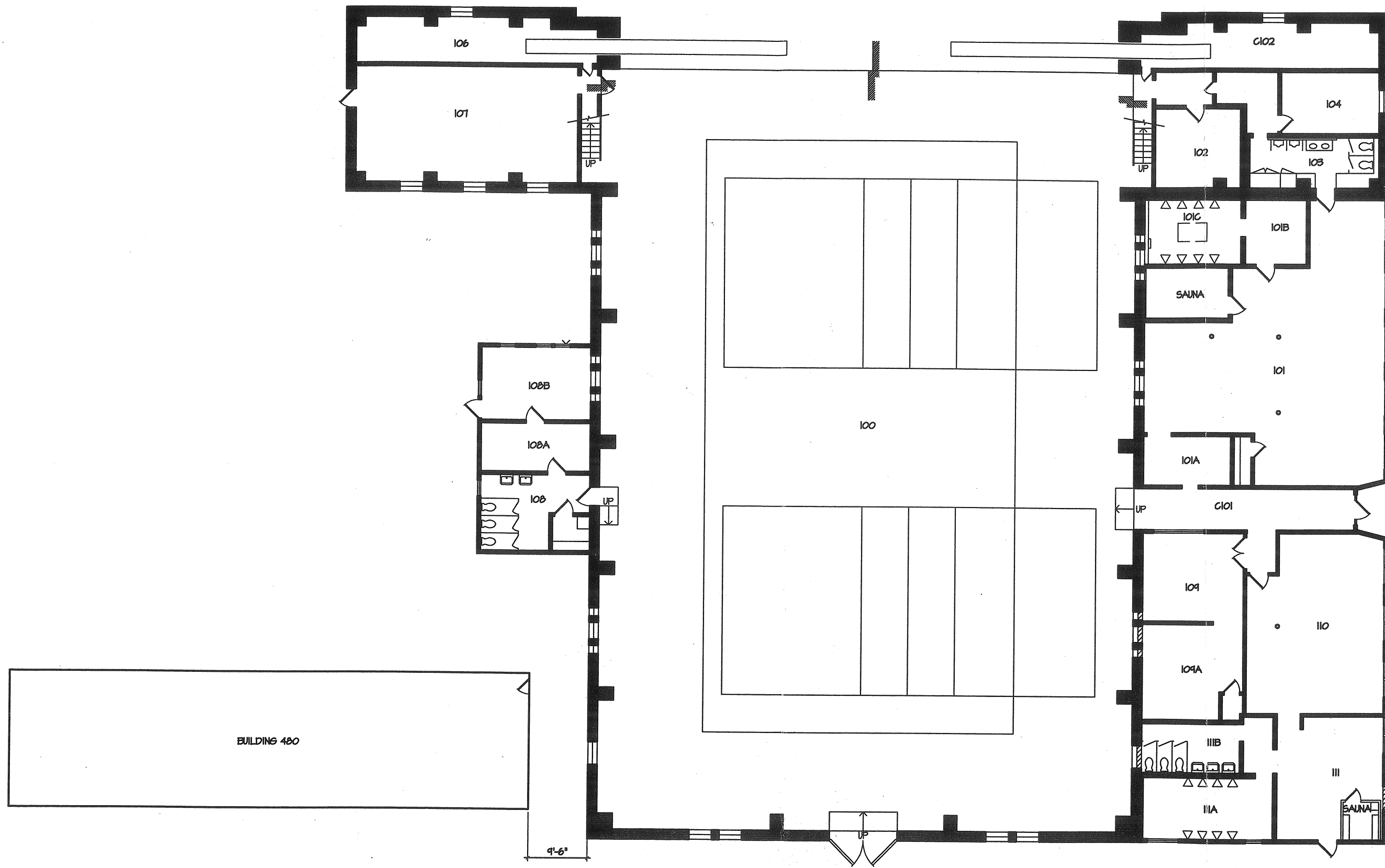
Condition Rating:

G=Good
F=Fair
P=Poor

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

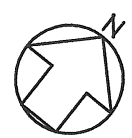
United States Naval Air Station
Sunnyvale, California Historic District
Building 2 Reuse Guidelines
Moffett Federal Air Field

Appendix 2. Existing Configurations Floor Plan



0 8' 16'

FIRST FLOOR PLAN



BUILDING 2
US Naval Air Station Historic District
Sunnyvale, California
00114
JANUARY 2004

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

United States Naval Air Station
Sunnyvale, California Historic District
Building 2 Reuse Guidelines
Moffett Federal Air Field

Appendix 3. Historic Aerial Photographs

**U.S. Naval Air Station Moffett Field
Building 10 Reuse Guidelines**

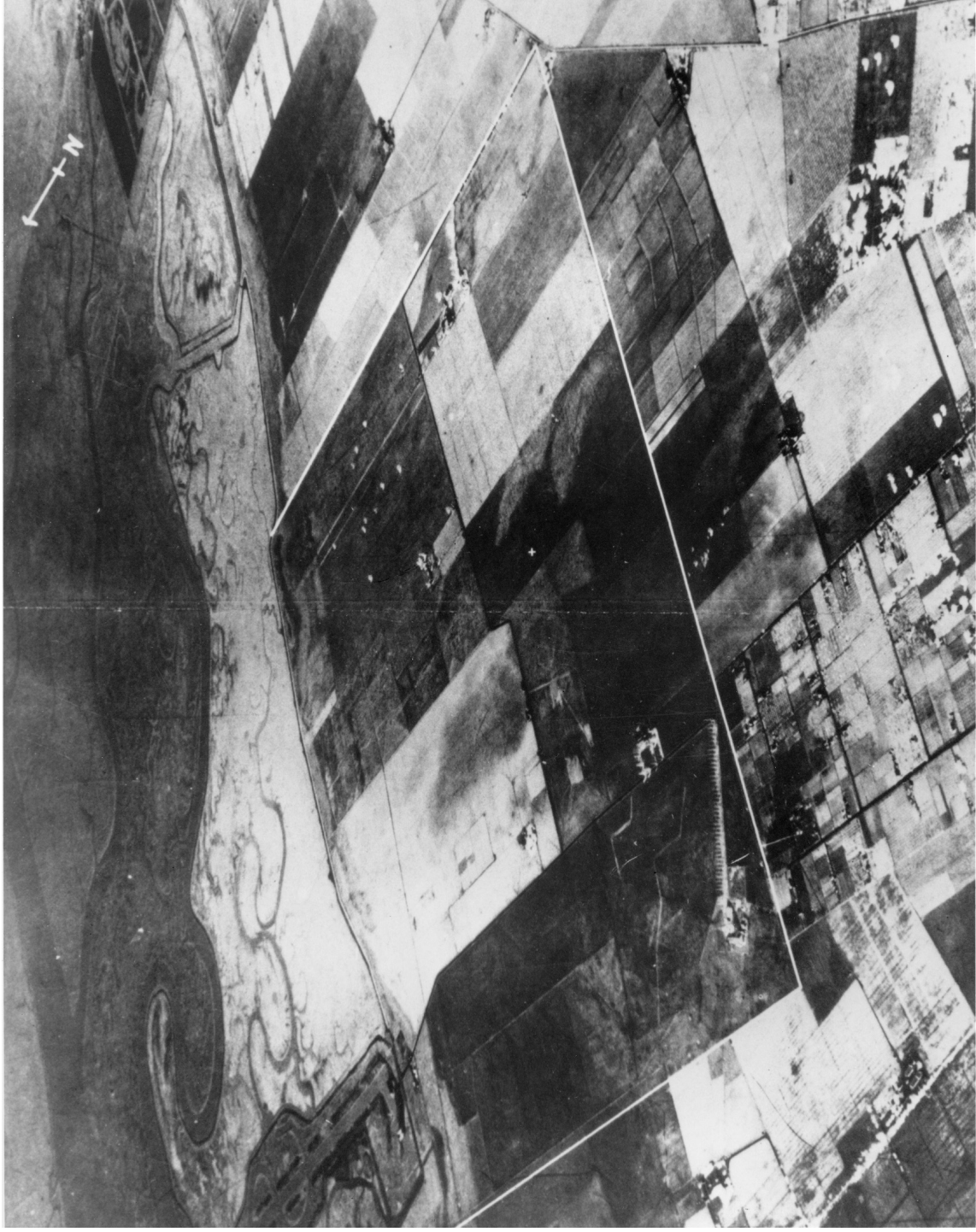


Figure 19: 1930 aerial of future Moffett Field site.

ARCHITECTURAL RESOURCES GROUP
Architects, Planners & Conservators, Inc.

**U.S. Naval Air Station Moffett Field
Building 10 Reuse Guidelines**



Figure 20: 1931 aerial of main hangar. The future site of Building 2 is at the center left.

ARCHITECTURAL RESOURCES GROUP
Architects, Planners & Conservators, Inc.

**U.S. Naval Air Station Moffett Field
Building 10 Reuse Guidelines**



Figure 21: 1935 aerial showing Building 2 under construction, near center.

ARCHITECTURAL RESOURCES GROUP
Architects, Planners & Conservators, Inc.

**U.S. Naval Air Station Moffett Field
Building 10 Reuse Guidelines**

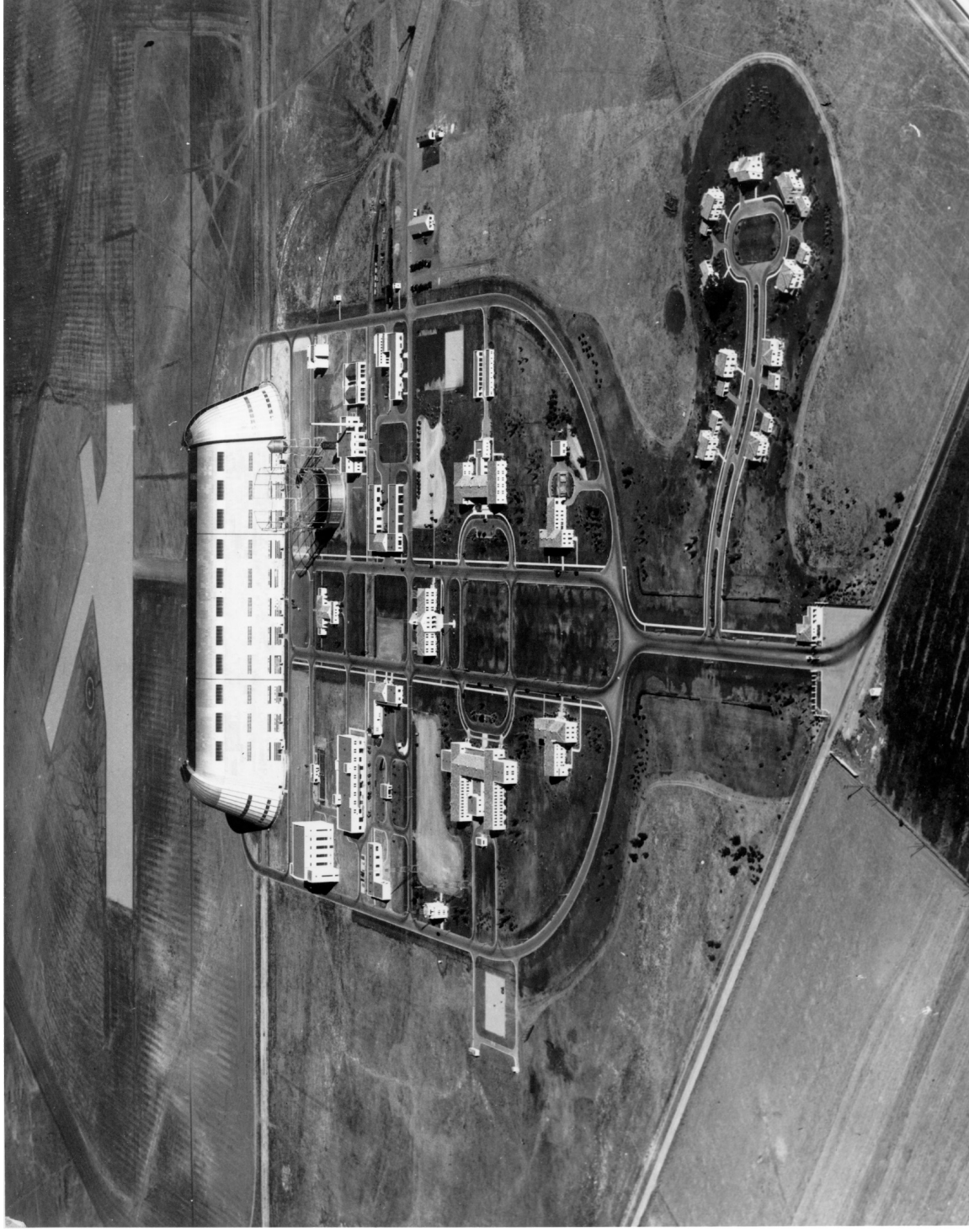


Figure 22: 1935 aerial showing Building 2, center left.

**U.S. Naval Air Station Moffett Field
Building 10 Reuse Guidelines**



Figure 23: 1936 aerial showing Building 2, center left.

**U.S. Naval Air Station Moffett Field
Building 10 Reuse Guidelines**

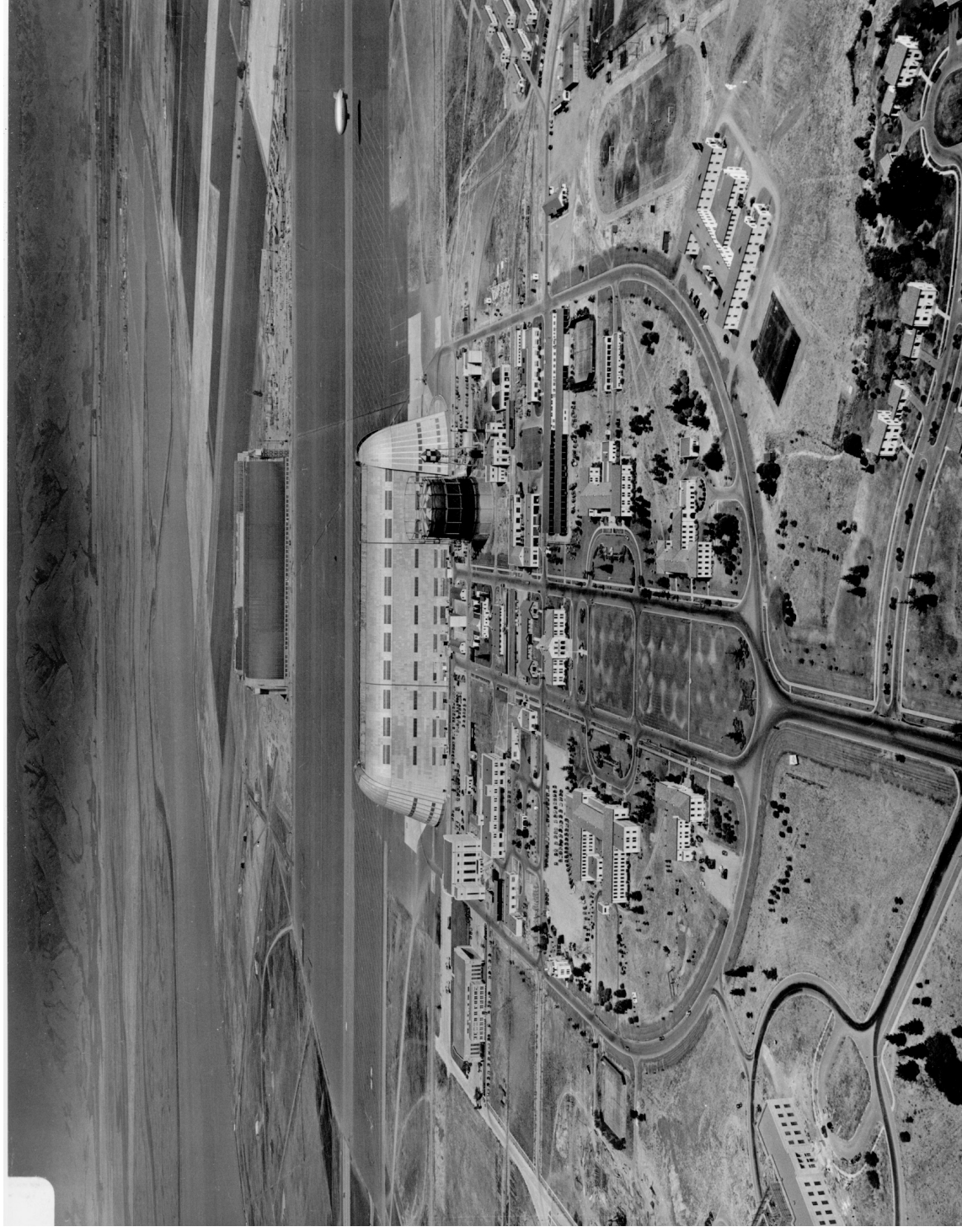


Figure 24: 1943 aerial showing Building 2, center left.

**U.S. Naval Air Station Moffett Field
Building 10 Reuse Guidelines**

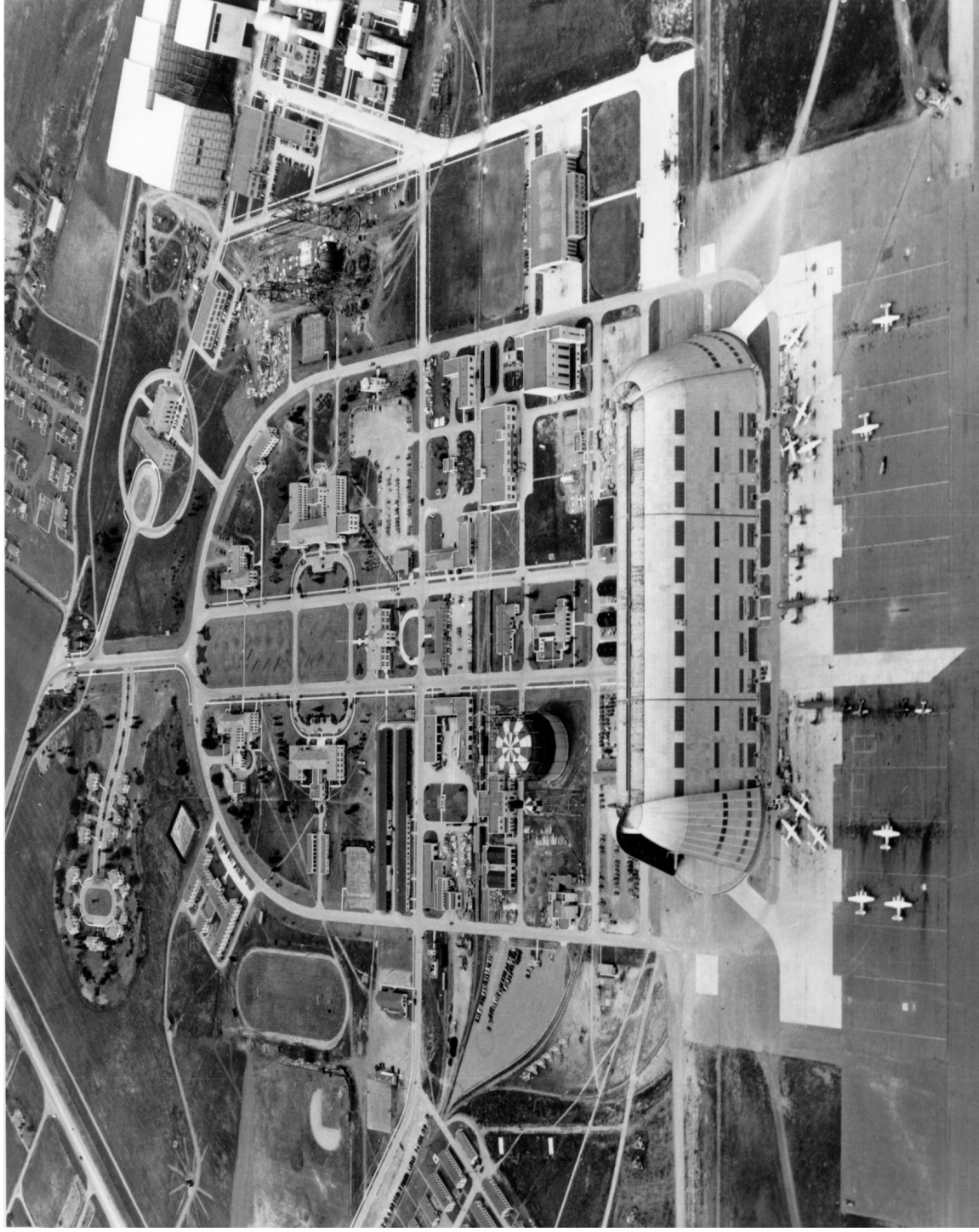


Figure 25: 1944 aerial showing Building 2, center right.

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

United States Naval Air Station
Sunnyvale, California Historic District
Building 2 Reuse Guidelines
Moffett Federal Air Field

Appendix 4. Current Conditions Photographs
(2003)



Figure 1: view of the East and West Elevations of Building 2. The one-story east addition is visible at the lower left.



Figure 2: view of the South and East Elevations. The east door wing is visible to the right.



Figure 3: detail of clerestory windows, stringcourses, and the upper lights of the vertical bands of windows.



Figure 4: view of main entrance to east addition.



Figure 5: view of the northwest corner of the gymnasium (former hangar). The second-story addition in the western door wing is visible in the center.



Figure 6: view of the northeast corner of the gymnasium. The steel door frame is visible to the left, and the two-story addition in the eastern door wing is visible near center.



Figure 7: view of the southwest corner of the gymnasium.



Figure 8: view of the southeast corner of the gymnasium.



Figure 9: view of an original, wall-mounted, light fixture.

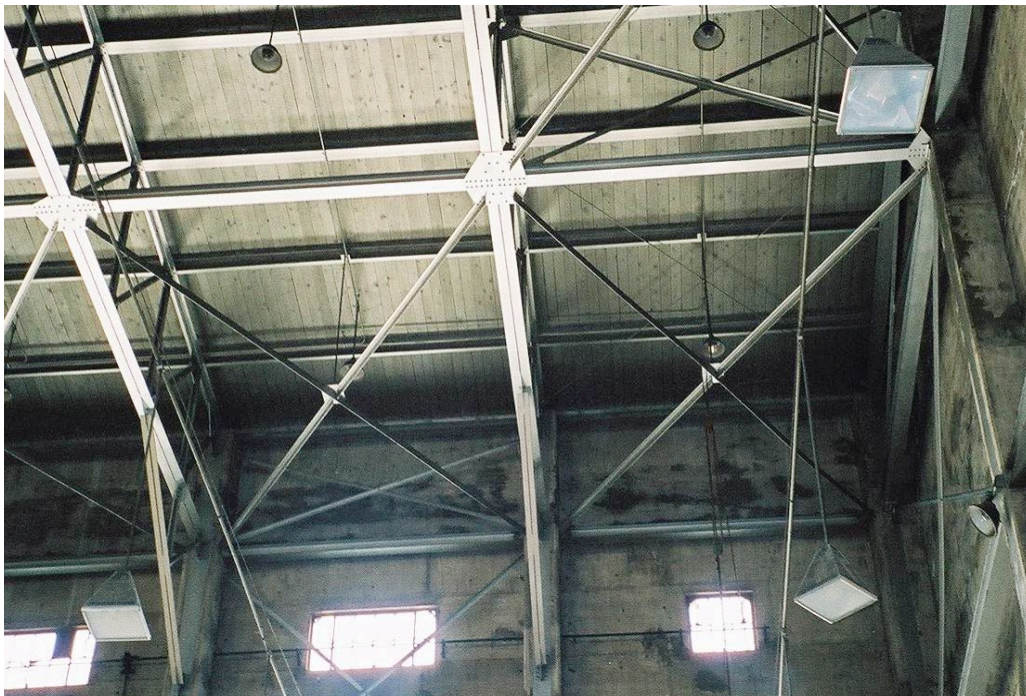


Figure 10: view of trusswork, clerestory windows, and suspended light fixtures.



Figure 11: view of the changes in floor level from the wings to the gymnasium floor.



Figure 12: view of original, wood panel doors in the door wings.



Figure 13: view of the workout room in the first floor of the western door wing.



Figure 14: view of the men's locker room in the eastern addition.



Figure 15: view of the front office in the eastern addition

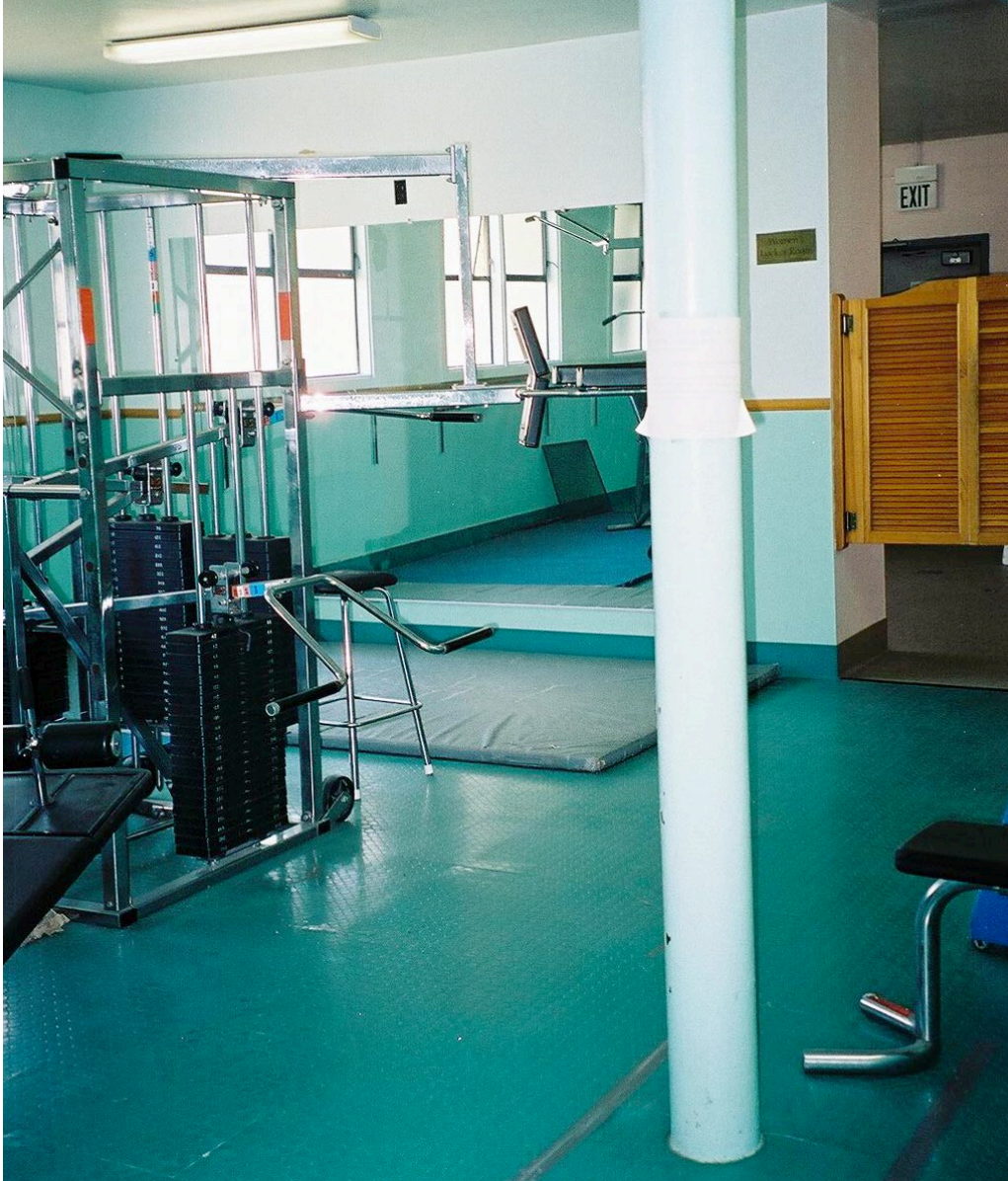


Figure 16: view of the women's weight room in eastern addition.



Figure 17: view of the racquetball court located southeast of Building 2.

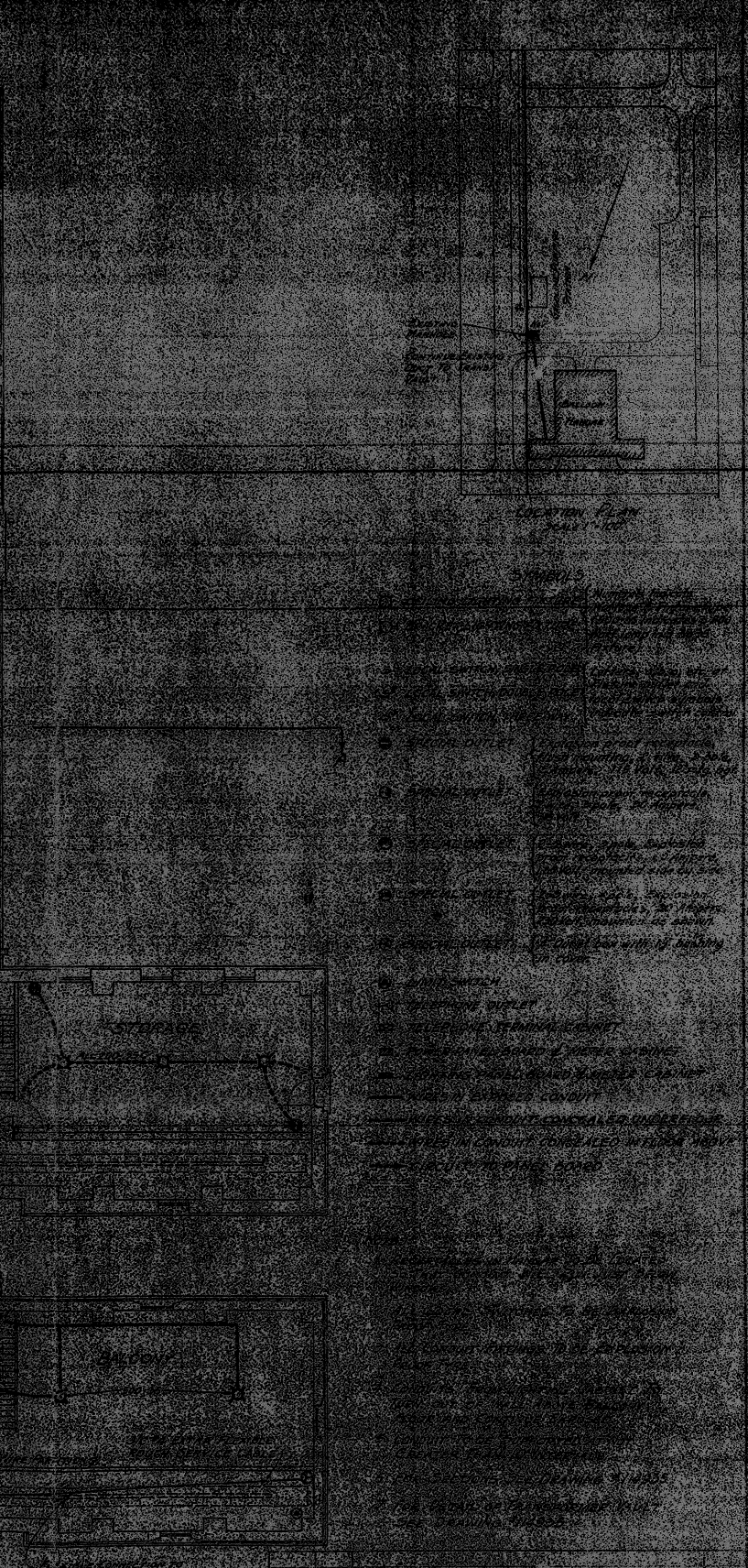
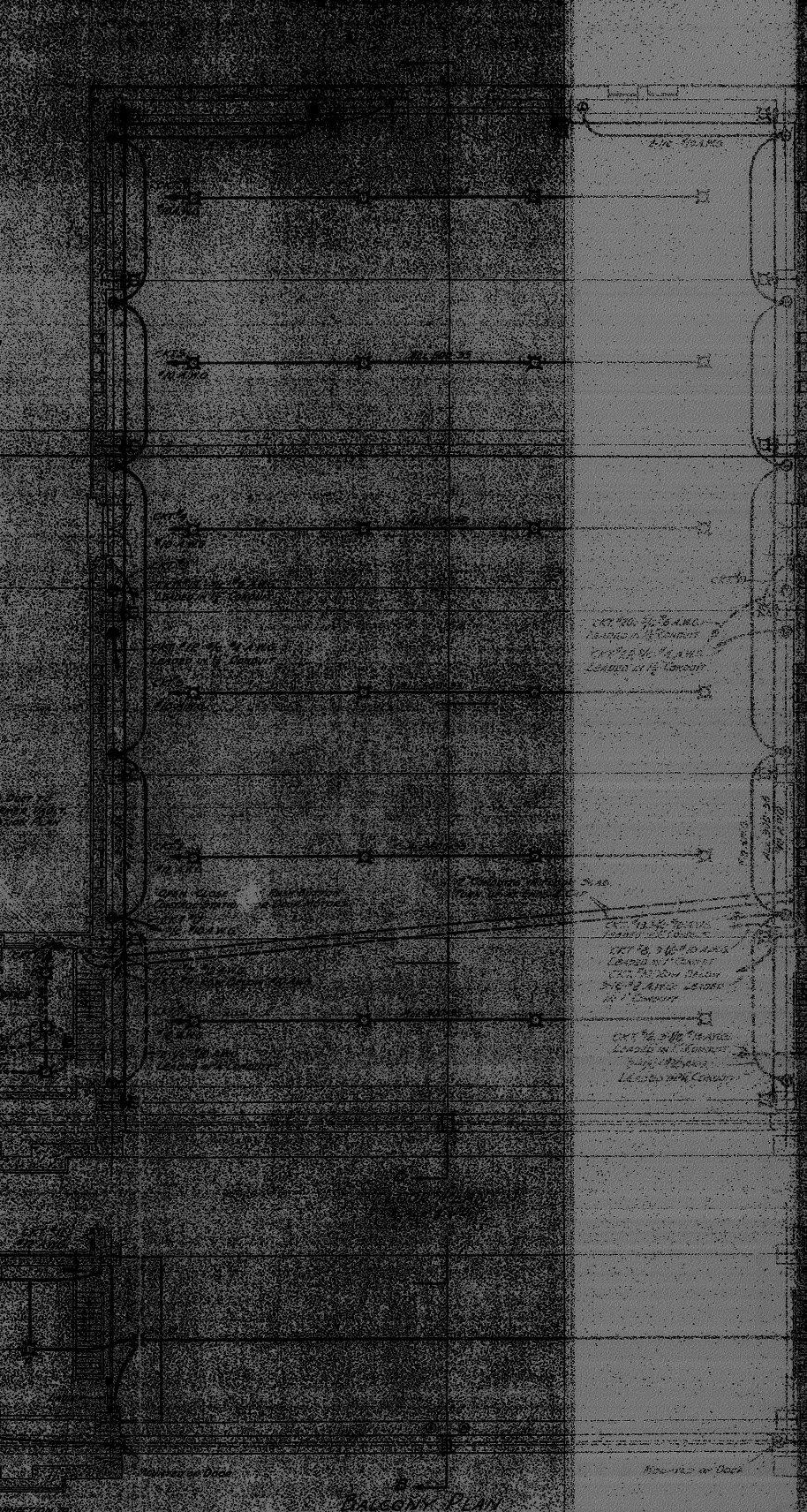


Figure 18: view of the West Elevation of the racquetball court. The small door is one of only two entrances to the building.

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

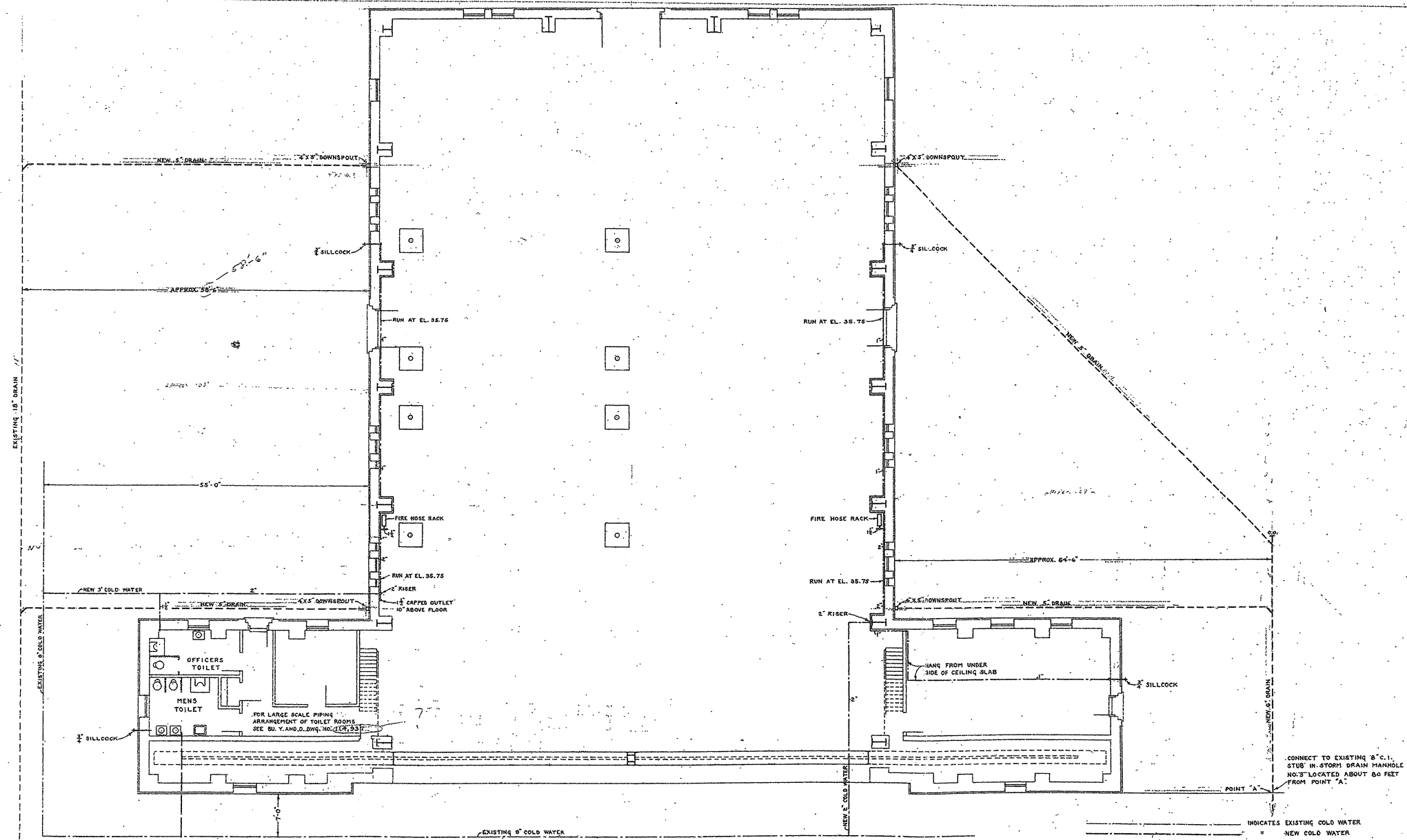
United States Naval Air Station
Sunnyvale, California Historic District
Building 2 Reuse Guidelines
Moffett Federal Air Field

Appendix 5. Construction Plans



ARC NUMBER
AD 3637474 D 52

U.S. NAVAL AIR STATION
JUNNVALE, CALIF.
BALLOON HANGAR
ELECTRICAL WORK



GROUND FLOOR PLAN
SCALE: 1/8" = 1'-0"

National Aeronautics and Space Administration
Ames Research Center
Moffett Field, California

AMV-0062-A

ARC-MOFFETT
A4568-9222-A0916

INDICATES EXISTING COLD WATER
NEW COLD WATER
NEW SEWER
EXISTING DRAIN LINES
NEW DRAIN LINES

Revision	Date	By
1		

Drawn by H.W. Tipton	U.S. NAVAL AIR STATION SUNNYVALE, CALIF. BALLOON HANGER GROUND FLOOR PLAN PLUMBING BLDG #2 BALLOON HANGER
Traced by H.W. Tipton	
Checked by S.M. Moran	
Supv. Dmn. S. Moran	
Chief Dmn. S. Moran	
Design Mgr. [Signature]	Approved [Signature] For Chief of Bureau
Sheet 16 of 17 accompanying specification	
No. 7027	

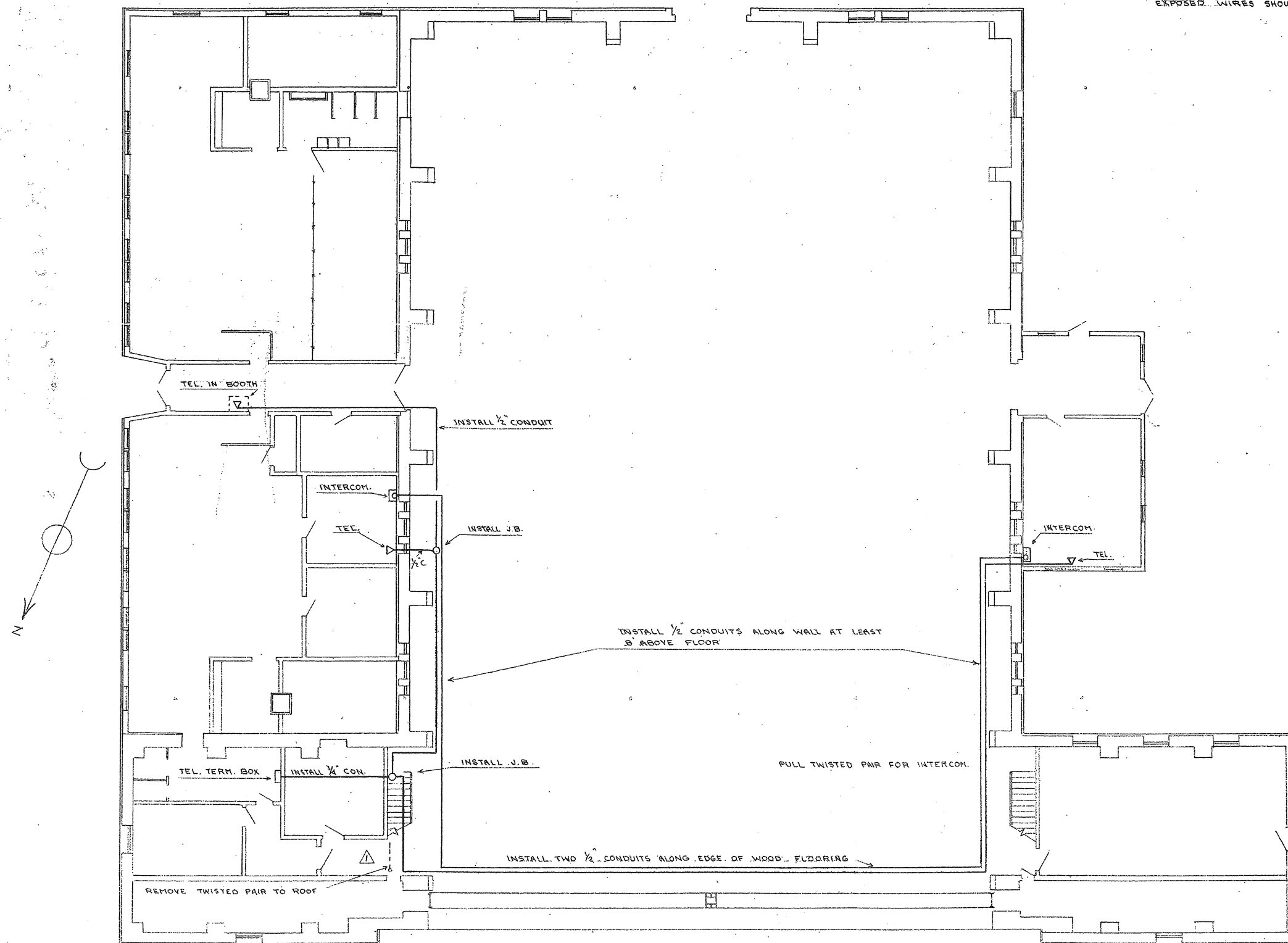
Y. & D. Drawing No.
114,936

Scale: 1/8" = 1'-0"

1202-19-18

NOTES

1. TELEPHONE CO. TO PULL WIRE FOR TELEPHONES ONLY
2. AFTER CONDUIT INSTALLATION AND WIRING, THE EXISTING EXPOSED WIRES SHOULD BE REMOVED



FIRST FLOOR PLAN

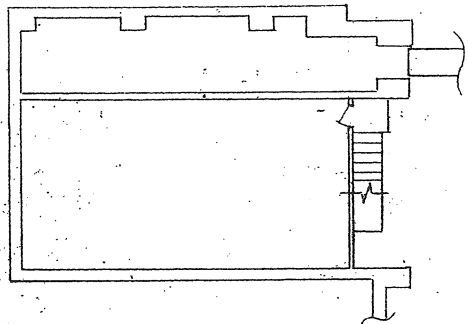
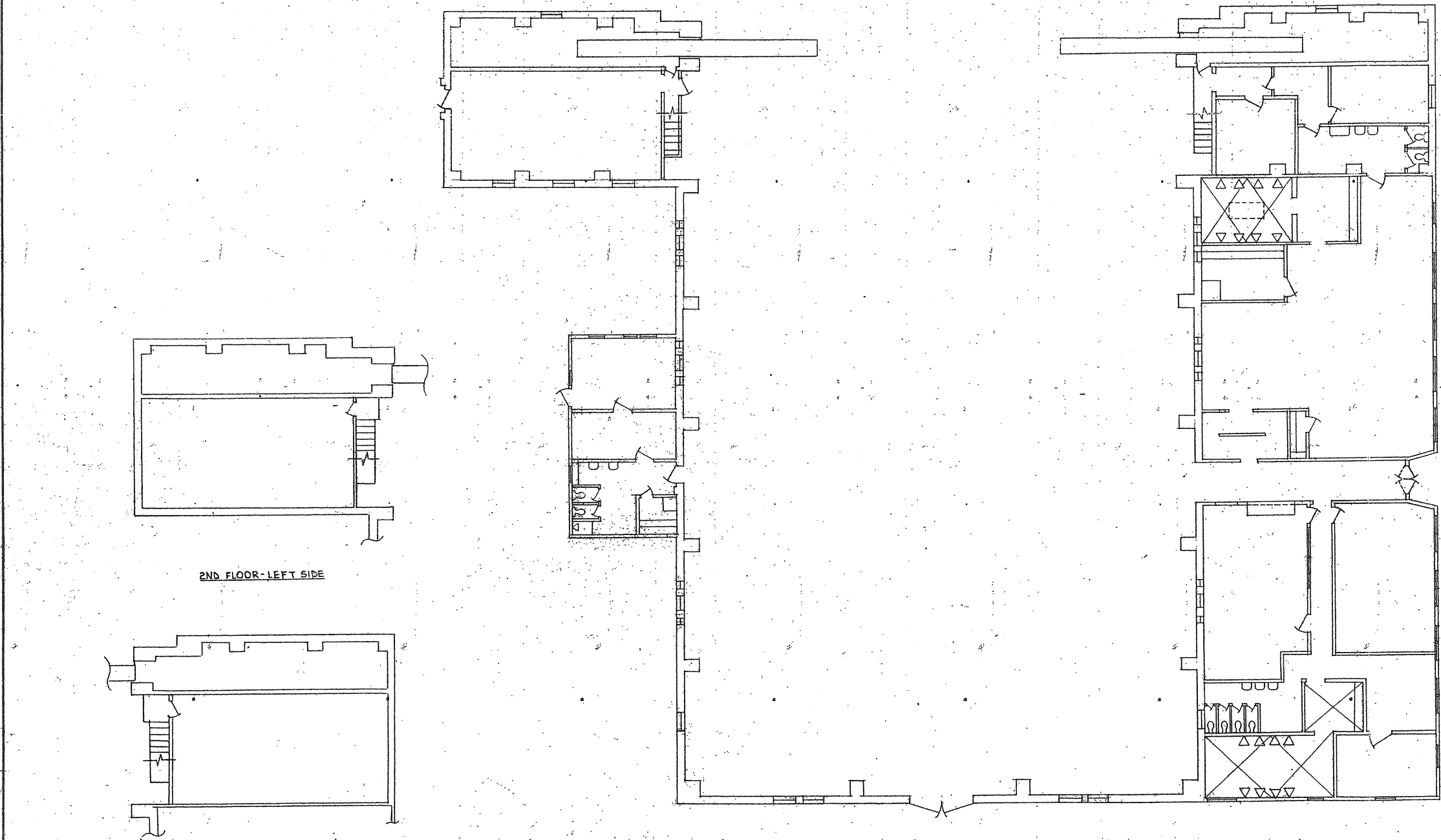
National Aeronautics and Space Administration
Ames Research Center
Moffett Field, California

Am4---0002-TCL

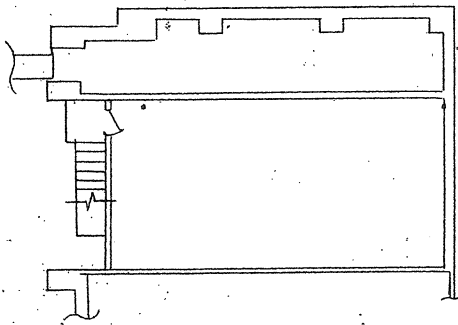
ARC-MOFFETT
A0002-0299-A1578

SYMBOL	DESCRIPTION	DATE	APPROVAL
Δ	DELETED CONDUIT RUN TO ROOF	11-17-53	TC
REVISIONS			
DEPARTMENT OF THE NAVY		BUREAU OF YARDS & DOCKS	
NAVAL AIR STATION		MOFFETT FIELD, CALIF.	
W.O. NO.	404-148	BLDG 2 INTERCOMMUNICATION AND	
P.O. NO.			
DES. FCC.			
DRWN. FCC.			

REVISIONS				
SYM	DESCRIPTION	PREP'D BY	DATE	APPROVED



2ND FLOOR - LEFT SIDE



2ND FLOOR - RIGHT SIDE

BLDG # 2 - FLOOR PLAN

National Aeronautics and Space Administration
Ames Research Center
Moffett Field, California
AM4---0002-A11

P.W. DWG. NO. 302-939		DATE 7-28-83	DEPARTMENT OF THE NAVY NAVAL AIR STATION		NAVAL FACILITIES ENGINEERING COMMAND MOFFETT FIELD, CA.
DESIGN T. CHUR		DATE 7-26-83	BUILDING #2 GYMNASIUM FLOOR PLAN		
CHECKED		DATE	SIZE F. 80091		
APPROVED BY DIRECTOR ENGINEERING DIV.		DATE	NAVFAC. DRAWING NO.		
APPROVED BY		DATE	CONST. CONTR. NO.		
PUBLIC WORKS OFFICER		DATE	SHEET 1 OF 1		
SATISFACTORY TO		DATE	SCALE 1/8" = 1'-0"		
SATISFACTORY TO		DATE	SPEC.		

COPY
IF SHEET IS LESS THAN
28" X 40"
IT IS A REDUCED PRINT —
SCALE REDUCED ACCORDINGLY

**U.S. Naval Air Station Moffett Field
Building 2 Reuse Guidelines**

United States Naval Air Station
Sunnyvale, California Historic District
Building 2 Reuse Guidelines
Moffett Federal Air Field

Appendix 6. NRHP Moffett Field
District Nomination

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY US Naval Air Station Sunnyvale, California, Historic Distric
NAME: t

MULTIPLE
NAME:

STATE & COUNTY: CALIFORNIA, Santa Clara

DATE RECEIVED: 1/13/94 DATE OF PENDING LIST: 1/26/94
DATE OF 16TH DAY: 2/11/94 DATE OF 45TH DAY: 2/27/94
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 94000045

NOMINATOR: FEDERAL *HP-47*

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: Y PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: Y NATIONAL: Y

COMMENT WAIVER: N

☒ ACCEPT ☐ RETURN ☐ REJECT 2/24/94 DATE

ABSTRACT/SUMMARY COMMENTS:

The U.S. Naval Air Station Sunnyvale, California Historic District is eligible under NR criteria A and C in the areas of Military History, Architecture, and Engineering. The discontinuous district represents a rather unique and significant episode in the development of U.S. naval aviation prior to World War II. The Sunnyvale base was one of two Naval Air Stations built to port lighter-than-air dirigibles during the 1930s. Dirigible Hangar #1, the later blimp hangars #2 and #3, and their accompanying support buildings all represent excellent examples of early twentieth-century military planning, engineering, and construction.

The three enormous airship hangars represent significant engineering accomplishments and they are among a limited number of extant historic airship facilities in the United States. The core of the historic Naval Air Station--centered on a landscaped "common" and dominated by the looming airship hangars--remains largely intact and includes fine regional examples of Spanish Colonial Revival design.

RECOM./CRITERIA Accept A+C
REVIEWER Paul R. Lusignan
DISCIPLINE Historian
DATE 2/24/94

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 94000045

Date Listed: 2/24/94

US Naval Air Station Sunnyvale,
California Historic District
Property Name

Santa Clara
County

CA
State

N/A
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Paul R. Lugin
Signature of the Keeper

2-24-94
Date of Action

=====
Amended Items in Nomination:

Classification:

The number of previously listed resources is changed to zero (0); Hangar #1 was only determined eligible for listing.

Significance:

Area of Significance:

Architecture is added as an area of significance, defining the district as a good regional example of military design in the Spanish Colonial Revival style.

Significant Person:

The name of Adm. William Adger Moffett is removed from the significant person blank since the district was not nominated under Criterion B.

continued

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation Sheet

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 94000045

Date Listed: 2/24/94

US Naval Air Station Sunnyvale,
California Historic District
Property NameSanta Clara
CountyCA
StateN/A

Multiple Name

=====

Amended Items in Nomination:

continued

U.T.M.:

The UTM coordinates are corrected to read:

A	10	582960	4140460
B	10	583240	4140880
C	10	583800	4141120
D	10	583940	4140740
E	10	583140	4140330
AA	10	584640	4141420
BB	10	584880	4141520
CC	10	584760	4141120
DD	10	584990	4141220

This information was confirmed with Navy FPO J. Bernard Murphy.

DISTRIBUTION:

National Register property file

Nominating Authority (without nomination attachment)

United States Department of the Interior
National Park Service

JAN 13 1994

RECEIVED

National Register of Historic Places
Registration FormNATIONAL
REGISTER

JUL 15 1993

ONP

84047

NPS-94000045-9999 ID AC

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name United States Naval Air Station Sunnyvale, California- Historic District
other names/site number U. S. Naval Air Station Moffett Field - Central Historic District

2. Location

street & number Central District ☐ not for publication
city, town Naval Air Station Moffett Field ☐ vicinity
state California code CA county Santa Clara code CA 085 zip code 94035

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
<input type="checkbox"/> private	<input type="checkbox"/> building(s)	Contributing	Noncontributing
<input type="checkbox"/> public-local	<input checked="" type="checkbox"/> district	<u>40</u>	<u>54</u> buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site	<u>1</u>	<u> </u> sites
<input checked="" type="checkbox"/> public-Federal	<input type="checkbox"/> structure	<u>2</u>	<u> </u> structures
	<input type="checkbox"/> object	<u>43</u>	<u>54</u> objects
			<u>54</u> Total

Name of related multiple property listing: _____

Number of contributing resources previously listed in the National Register 1

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ☒ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of certifying official

Department of the Navy Federal Preservation Officer

State or Federal agency and bureau

Date

Jan 5 / 94In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official

Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

- ☒ entered in the National Register.
☐ See continuation sheet.
☐ determined eligible for the National Register. ☐ See continuation sheet.
☐ determined not eligible for the National Register.
☐ removed from the National Register.
☐ other, (explain): _____

Cal R. Fung2-24-94

6. Function or Use

Historic Functions (enter categories from instructions)

Defense Naval Facility

Air Facility

Current Functions (enter categories from instructions)

Defense Naval Facility

Air Facility

7. Description

Architectural Classification

(enter categories from instructions)

Late 19th and 20th Century Revivals

Mission/Spanish Colonial Revival

Other: Dirigible Hangar

WW II Blimp Hangar (2)

Materials (enter categories from instructions)

foundation concrete

walls stucco

roof clay tile

other terra cotta panels

Describe present and historic physical appearance.

SITE DEFINITION

The site consists of a large number of buildings that were constructed over an approximately 60 year time frame from the early 1930's until today. The buildings are clustered in a formal campus-like layout that is defined by a western-facing gated entrance and a very well tended landscape which includes mature specimen trees, shrubs, and manicured lawns.

The site can be easily divided into its stylistic components that also define the different eras of construction over the base's lifetime.

The oldest and most historically significant buildings, from an architectural and engineering standpoint that form a coherent core, include the formal cluster of buildings dating from 1933 that lead up to, and include, the imposing Hangar #1 (the original dirigible hangar) and WWII Blimp Hangars. This area of the base is bounded by Bushnell Road on the north, the automobile parking spaces behind Sayre Avenue on the east, Westcoat Road on the south; and the entry, Clark Road, on the west. The central area is laid out in an axial plan in a northeasterly direction with the original buildings symmetrically placed along a grand central greensward. In addition to this very defined central space where the earliest major base buildings are located, there is an equally significant adjunct of 9 officers' residences clustered around Berry Drive just to the south of the main gated entrance in another formally laid out plan with grass medians, a grass island at the end of the southern cul-de-sac, and a characteristically suburban curved residential street. In keeping with the symmetry that was so strong to the original plan, another unbuilt residential complex was originally planned for the northern side of the entrance drive.

These earliest buildings, which were designed by the Navy Department Bureau of Yards and Docks, exemplify California's most popular contemporary architectural style of the 1920's and early '30's. They are constructed in a late Spanish Colonial Revival architectural style (a style that was equally as popular in government construction in the eastern sections of the United States during the 1920's and into the early 1940's), as well as aspects that presage the modern designs of the Internationalist styles which would predominate in American architecture for the next thirty-five years (from approximately 1940 to 1975).

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

☒ nationally ☐ statewide ☐ locally

Applicable National Register Criteria ☒ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions)

Military

Engineering

Period of Significance

1930-1935

1942-1946

Significant Dates

Cultural Affiliation

Significant Person

Moffett, William Adger; Admiral

Architect/Builder

U.S. Navy Bureau of Yards and Docks

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

In the nation's quest to provide security for the lengthy expanse of its coastlines the opportunity for air reconnaissance was realized by the futuristic Admiral William A. Moffett. Through his efforts, two Naval Air Stations were commissioned in the early 1930's to port the two U.S. Naval Airships (dirigibles) he believed capable of this challenge. The Naval Air Station Sunnyvale was the Pacific Coast location selected, designed and developed to port USS MACON (ZRS 5). The immense structure, Hangar #1, designed to house USS MACON, with its larger counterpart in Akron, Ohio, remain the two largest structures in the United States without internal support. At the onset of WWII, the base was expanded with Hangars #2 and #3 which were designed to accommodate the smaller blimps and balloons used for reconnaissance, until the range of heavier than air aircraft (airplanes) was sufficient to patrol the coast. The significance of the U.S. Naval Air Station Sunnyvale Historic District is attributed to the association with the expanding defense capabilities of the U.S. Navy, the engineering technology found in lighter than air ships, the design of the hangar and system for porting the dirigible and in the plan and architectural style of the station designed to support this defense technology. The significance of Hangar #1, was recognized when it was designated a Naval Historical Monument. It has been designated a California Historic Civil Engineering Landmark, by the San Francisco section, American Society of Civil Engineers, and has been determined eligible for listing in the National Register of Historic Places by the U.S. Navy in consultation with the California State Historic Preservation Officer. The entire historic district is supported for listing in the National Register of Historic Places at the national level of significance under Criterion A for the association with coastal defense and naval technology that has made a significant contribution to the broad patterns of our history; and Criterion C reflecting the distinctive type, period, method of construction and high artistic values that are represented in the 1933 station plan and buildings. In 1942, the station was recommissioned, U. S. Naval Air Station, Moffett Field, in recognition of the significant contribution to naval history by Admiral Moffett, contributions that have gained him the unofficial title, "Father of Naval Aviation."

☒ See continuation sheet

9. Major Bibliographical References

Gragg, Dan The Guide to Military Installations, Harrisburg, PA; Stackpole Books, 1983
Payne, Stephen M., Santa Clara County: Harvest of Change, Santa Clara, CA; Windsor Publica
1987

Unpublished:

Histoirc Civil Engineering Landmarks of San Francisco and Northern California, 125th
Annual Conference, American Society of Civil Engineers, San Francisco Section,
Sponsor, 1977.

Ifft, Jerry. The Era of Dirigibles at Moffett Field, 1987; California Room, Martin Luthe
King, Jr. Memorial Library, San Jose, CA

Interviews:

Benjamin Mandweiler, NAs, Moffett Field, Public Works Department
Lt. Col. Robert N. Maupin, USAF. Ret.

☐ See continuation sheet

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67)
has been requested
☐ previously listed in the National Register
☐ previously determined eligible by the National Register
☐ designated a National Historic Landmark
☐ recorded by Historic American Buildings
Survey # _____
☐ recorded by Historic American Engineering
Record # _____

Primary location of additional data:

- ☐ State historic preservation office
☐ Other State agency
☒ Federal agency
☐ Local government
☐ University
☐ Other

Specify repository: _____

10. Geographical Data

Acreage of property 124 Acres (approximately)

UTM References

A

1	0
---	---

3	7	7	0	3	6
---	---	---	---	---	---

1	2	2	0	5	9	8
---	---	---	---	---	---	---

Zone Easting Northing
C

1	0
---	---

3	7	6	9	9	9
---	---	---	---	---	---

1	2	2	0	6	2	5
---	---	---	---	---	---	---

B

1	0
---	---

3	7	6	9	7	5
---	---	---	---	---	---

1	2	2	0	6	0	4
---	---	---	---	---	---	---

Zone Easting Northing
D

1	0
---	---

3	7	7	0	6	3
---	---	---	---	---	---

1	2	2	0	5	3	0
---	---	---	---	---	---	---

☒ See continuation sheet

Verbal Boundary Description

The Naval Air Station Sunnyvale includes all of the 1933 original base plan with the addition of the 22.5 acre detached area containing hangars #2 and #3. The boundary line begins at the Main Gate, including the entrance gate and fence, proceeds along Clark Road to Berry Road where the boundary turns south to encircle the quarters A through H, north behind quarter F to Westcoat Road, east to Sayre Ave., north to Bushnell Road and west to Clark Road. A detached area is included in the historic district to incorporate hangars #2 and #3 with a 25 foot band of land around the pair.

Boundary Justification

The boundary includes the limits of development in the 1933 base plan for the Naval Air Station Sunnyvale, as prepared by the Navy Department, Bureau of Yards and Docks, and the area incorporating hangars #2 and #3 that are associated with lighter than air military aircraft.

☐ See continuation sheet

11. Form Prepared By

name/title Bonnie Bamburg
organization Urban Programmers date November 9, 1991
street & number 1174 Lincoln Avenue telephone 408-971-1421
city or town San Jose state California zip code 95125

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 2

This hybrid style forms a unifying element that not only holds the myriad of architectural uses together, but gives the entire complex a very satisfying central theme. The style is highly ornamented in the most significant buildings (such as the Administration and Bachelor Officers' Quarters) and stripped of ornament, but no less supportive of the whole in the smaller out buildings and garages. Interestingly, the building that is the raison d'etre of the entire Naval Air Station, Hangar #1, eschews any historicism in its design, but rather reflects the highest Streamline Moderne forms of modern technology at its finest.

Another slightly newer cluster of buildings is also defined by their distinctive architectural style which reflects the most popular designs of their time. These buildings are those structures which were built in the 1940's and early '50's and that are designed in a very plain International style of architecture defined by the simple stripped geometrical forms of the structures. These interesting examples are located at a few scattered sites within the original plat noted above (i.e. the Post Office, #67, for example), as well as being set in a long row along Dailey Road between the original campus plan and the Bayshore Freeway (#152). Other noteworthy buildings include the Control Tower (#158) at the far eastern edge of the site and the original Chapel Building (#86), which is a reinterpreted hybrid style that exhibits aspects of both a stripped Spanish Colonial Revival design and ornament hinting at more of a Mission Revival style. Additionally, two slightly smaller, but no less impressive hangars (Hangar #2 and #3), were constructed across the runways to the east of Hangar #1. These buildings were designed for the smaller blimps that replaced the huge rigid framed dirigibles of the 1930's for which Hangar #1 was designed. They also were designed in a much more prosaic and conventional architectural style than the metal sheathed futuristic Hangar #1.

A building that provides visual compatibility with the 1930's Spanish Colonial Revival buildings is the Chapel. This is due both to its physical location within the historic district, as well as to its architectural design, which is much more compatible with the older buildings on the base rather than the later International styled buildings. Early photos of the building illustrate a structure whose basic form of rather simply pitched cruciform plan appears to be very standard designed archetype military base chapel of the 1940's. But to this basic form, the designers add very site specific detailing which, though not technically a re-creation of the Spanish Colonial Revivals around it, very handsomely picks up hints of the building characteristics of the older structures. These details include, most importantly, the cupola which mimics the tower on the Administration Building, and the projecting curvilinear portico with its stone-like entry frame which takes directly from the Spanish Colonial Revival interpretations surrounding. The end result is an almost textbook example of a successfully designed new structure sensitive to an established architectural campus. Because the chapel was constructed well after the 1933 period it is not a contributing building to the historic district.

Because the International style buildings are less than 50 years old and are not individually exceptional, they will not qualify for listing in the National Register at this time and will not be discussed in any detail. This group consists of buildings 148-156, 158 and building 67.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 3

In addition to these two major stylistic groupings, there are a number of other buildings on the site that have been constructed over the past approximately 50 years that fill up the site, but do not represent very fine examples of architectural design. These buildings are characterized by their utilitarian function, such as the number of Quonset huts (#111, #118 and #119) found throughout the site, as well as the plethora of small wooden and stucco buildings with little discernible styling that comprise much of the barracks, enlisted housing, shopping and warehousing spaces (#E-52, #E-13, #E-29, #347, #223, #245, and #244).

Thus from a specific design standpoint, the site can be divided into the following five main components that comprise its strongest identifying features:

- A. Original Spanish Colonial Revival Design
- B. Significant Engineering Features (Hangars #1, #2, & #3)
- C. Miscellaneous Supportive Design Features
- D. Post 1935 buildings designed in the Spanish Colonial Revival Style
- E. International Style Buildings from the 40's

Out of these five categories, the proposed historic district from the 1930's will include all those features identified with item "A, B & C" immediately above.

A. ARCHITECTURAL DESCRIPTION OF THE SPANISH COLONIAL REVIVAL-DESIGNED ORIGINAL BASE BUILDINGS.

The original plan of Moffett Field was constructed in an architectural style that had as its antecedent the exuberant and capricious ornamentation applied by the 17th Century architect, Jose Churriguere, and eloquently revived by Bertram Goodhue in the design for the 1915 San Diego Panama Pacific Exposition. The Navy first attempted the style at Chollas Heights Radio Transmission Station in 1916 and followed with Goodhues' Marine Corps Recruit Depot, c. 1920, Naval Air Station North Island, c.1921, and his sketches for the Naval Training Center in San Diego, a year or so later. This form of Spanish Colonial Revival design reached its zenith at the end of the 1920's and was gradually losing favor to the modern designs of the mid-to-late 1930's. By the 1940's only some very late examples, usually transitional in styling that reflected the rise of both modern schools of architecture (Moderne and Deco styles, as well as the later International or Bauhaus-influenced styles) were being built.

The complex of original buildings that comprise the heart of the Naval Air Station Moffett Field are examples of late Spanish Colonial Revival design reflecting a much more severe example of this style with strong influences of the more modern style precepts, as well as hints of Eastern Colonial designs. The resulting hybrid significantly alters the original architecture of this style.

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 7 Page 4

These buildings are characterized as essentially two-storied white or off-white stucco structures that are capped by very low-pitched Spanish tile roofs, which are punctuated by projecting chimneys, air ducts and, in the case of the true centerpiece building, the Administrative Building (#17), a richly ornamented, roof pavilion where corner columns support a decorated dome. The buildings are all rectangular in plan with either central projecting spaces or corner wings. Wall surfaces are very plain with the major break up of space occurring either in the location of rectangular-shaped windows, slightly projecting stringcourses between the floors, round arched entryways or arcaded ornamentation styled to look like granite around the major entry doors and surrounding significant window spaces.

It is the variation of the above major design elements that define the original base architecture. The two most handsome entrances are the round arched arcades that distinguish both the aforementioned Administration Building and the equally impressive Bachelor Officers' Quarters (#20). Repeated ornamentation include the flattened um motif, various cartouches, and quarter-foil windows found along the exterior surfaces of all the major structures. The juxtaposition between the flat surfaces of the exteriors contrasting with the florid ornament around the major doors and windows provide the perfect tension that distinguishes the Spanish Colonial Revival style. A notable somewhat stripped example of this style is the impressive original Aircraft Tower (#18).

Some of the minor out-buildings, although stripped of much ornamentation, exhibit sensitive design features such as the low stepped parapets of buildings #22 and #2, the repeated multilight apertures of #10, and the simple, yet distinctive massing of the original portions of #6, which acts to reinforce the common design theme throughout the historic core. All of these original outbuildings significantly reinforce the common design theme of the historic campus.

The second cluster of original buildings, which forms an equally impressive uniform design statement, is found in the earliest residential units of the detached officers housing. In this extremely pleasant space, made so by its luxuriant landscaping and large unbroken lawns, a very simple house plan is repeated with only slight variations. The structures are designed in a very stripped and somewhat severe Spanish Colonial Revival style with two-storied, rectangular plan residences joined to a garage, either a one or two storied garage, by an arcade. The roof lines are low pitched gables that are sheathed in red Spanish tiles and punctuated by end fireplaces. Apertures are symmetrically placed on the structures with the dominant design characteristically reserved for the front entry. Windows are generally rectangular in shape, double hung and 3 over 2 in design. As with the major buildings on the working base section, here two stringcourses and various door surrounds provide the major contrast to the very simple stucco walls. Additionally, a similarly designed structure forms a prominent security building at the front gateway.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 5

B. DESCRIPTION OF THE ORIGINAL ENGINEERING FEATURES (HANGARS #1, #2, AND #3)

Completely separate in design, but of such striking style and size as to warrant separate discussion are the three buildings that form the raison d'être of the entire complex. The three hangars are of such proportions that for this reason alone they warrant the title "landmark". Aesthetically, the original hangar, which was constructed to hold USS MACON, a dirigible, is of such a unique design that it stands apart even from its later sister buildings. Hangar #1 is a metal sheathed behemoth whose rounded shape is both the epitome of the aerodynamically influenced Streamline Moderne style as well as a stylistic cousin to the huge airship that originally berthed inside the mammoth hangar.

Above all other buildings found on the Moffett Field site, Hangar #1 is without question the most significant building both architecturally and historically. It is one of the major buildings of Northern California, and has been recognized as an Engineering Landmark by the American Society of Civil Engineers.

Hangars #2 and #3 are significant more for their size than their unique styling or design. They represent more prosaic attempts at constructing very large military hangars. Similarly designed structures are found on Marine Corps Air Station, Tustin, California and at Coos Bay, Oregon. The more common design does not, however, detract from the sheer magnitude of the two huge buildings side by side. Along with Hangar #1, these two buildings help define the south San Francisco Bay Area from all distant directions.

C. DESCRIPTION OF THE OTHER SUPPORTIVE DESIGN ELEMENTS (I.E. LANDSCAPING, GATEWAYS, ARTWORK AND ITEMS OF INTEREST IN THE LANDSCAPE, STREET LIGHTING, AND SIGNAGE)

The third and final group of elements add immeasurably to the quality of design cohesion that characterizes the Naval Air Station Moffett Field site. These elements support the physical layout of the site plan as well as the quality of the original historical architecture. They also help define the campus-like quality of the base as well as unify the disparate building styles and types.

Most prominent of these supportive elements is the landscaping. The ubiquitous mature trees, the huge green spaces, and the careful placement of plants and shrubs which add immeasurably to the mise-en-scene. The luxuriant and well tended landscape is the first feature which one experiences after passing through the entry gate. Early photos of the site show a very desolate natural landscape which was essentially bay lowlands. Blueprint plans from April 29, 1933 illustrate the importance that a unifying and coordinating landscaping plan for the air station had in forming the basis for today's superlative luxuriant landscape. There could be no doubt that the existing grounds could not have been produced without a well conceived original plan.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 6

Of almost equal importance in differentiating the site from its surroundings is the entry wall and gate itself (#36). Although very restrained in design, the gate forms a physical entrance into the unique area from the very bland surrounds. It should be noted that the wall, gateway, and gatehouse all derive from the original base architectural design plan.

Street furniture, interesting items on the landscape, and street lighting also add to the unique quality of the site. The furniture includes a detached community message board, a sundial and an historic anchor, both in front of building #25, as well as within the central greensward. The street lighting still retains its original bases, but the lamps themselves, from a later '50's design, are somewhat inconsistent with the Spanish Colonial Revival buildings of the historic core. Replacement with a more original form should be encouraged.

Signage too helps add to the unifying elements of the site. It is, most prominently in the historic core, understated in blue with gold lettering which is very supportive of original high design standards. Such attention to detail should also be encouraged to continue. For it is in the sum of all of these disparate features that the whole of a unique and memorable built environment results.

INDIVIDUAL SITE DESCRIPTIONS:

The following descriptions define the special design characteristics that distinguish the architecturally significant buildings from the 1933 plan (with two notable exceptions being a description of the 1943 designed Hangars #2 and #3).

HANGAR # 1: BUILDING #1 NPS-9400045-0001 ID

The site consists of a very large (1140'x308'x194') single-story, dirigible hangar that is constructed with three hinged steel truss arches and "X" cross bracing that is sheathed in large metal plates and set on a huge rectangular-oriented, elliptical shaped, floor plan and designed in a slightly flattened parabolic form. The structure further exhibits four rows of very large rectangularshaped and horizontally-oriented window bands along its two dominating eastern and western facing flanks. These apertures appear flush with the immense metallic skin of the building and greatly add to the very futuristic aerodynamic effect of the design.

Of particular engineering note are the hangar doors that run the full height of both the north and south-facing elevations. These doors are retractable and form a halfdome shape when closed.

The building exhibits a very clean, Streamline Moderne design which perfectly mimics the form of the airships themselves. Located perpendicular to the axis of the station plan this dominate structure provides the focus of the 1933 station plan.

The mammoth structure designed to hold fully inflated giant dirigible airships from the 1930's military fleet (such as USS MACON) was actually constructed in 1932 preceding the buildings of the surrounding base which date from 1933. The structure is important due to its unique use (dirigible hangar), beautifully executed Streamline Moderne architectural design, ingenious

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 7

engineering construction; and for its very size that still dominates a greatly urbanized Santa Clara County in the 1990's. From all aspects of national landmark status criteria, this building qualifies on its own. When added within the context of the surrounding supporting campus plan, the entire ensemble forms a very unique sense of place within the built environment and continues to exhibit national prominence.

HANGAR #2 AND #3: BUILDINGS #46 AND #47

115585 115587
-0038 -0039

17

The site consists of twin hangars that were designed for the, blimp fleet during WWII. They are of treated California redwood frame construction, configured on a rectangular plan in a more flattened parabolic form than Hangar #1; and characterized by their immense, moderately pitched porticoes at each of the north and south-facing hangar doors. These dominating entries are supported by very large concrete piers at each of the four corners. The twin buildings are set on a site plan that is directly oriented with the earlier Hangar #1, which is due west. The scale of the structure is exemplified by their dimensions, which at 1,075'x297'x171' (180,518 sq. ft.) make them slightly smaller than their predecessor, but still very impressive on the landscape. The use of wood construction instead of a steel truss system was in response to the war effort. Like most west coast military facilities constructed after 1941, metal was used very sparingly to conserve the resource for use in constructing ships and armament.

The design of these two buildings is in a much more conservative architectural style than the futuristic form of Hangar #1. These later hangars are almost domestic in their gabled porticoes. They definitely lack the daring and ingenuity of the other hangar's form and they are much less a unique design to the area. In fact, four other structures of like design were built on the west coast during World War II, to house the blimps used to patrol the Pacific coastal waters of the United States. Two in Coos Bay, Oregon which are no longer owned by the Federal Government and two on what is now Marine Corps Air Station, Tustin in Southern California. All four of these structures have been nominated to the National Register.

Although not of equal architectural or design merit as Hangar #1, these two like-structures are significant from both an historic perspective (as excellent extant examples of WWII blimp hangars) as well as an architectural/engineering perspective (they are after all buildings of incredible size and stature upon the landscape). The twin structures further add to the important design whole of the best of the original 1933 plan and the just slightly less impressive structures from the 1940's which help-in-fill much of the site. They were completed in 1943. The combined visual power of Hangars #1, #2, and #3 form a physical presence upon the urbanscape which still dominates the low horizontal design of the Santa Clara Valley.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 8

115554 NPS - 94000045 - 0007 1D

ADMINISTRATION BUILDING: BUILDING # 17

The site consists of a two-story structure that is constructed on a shallow cruciform rectangular floor plan which is built of wood and sheathed in stucco with red Spanish tile roofing and terra cotta ornamentation, especially notable in the window and door surrounds. The building is the most prominently sited structure within the 1933 campus plan. It is set in the very heart of the open grassy median as a definite center point to the original plan. Its architectural design represents a late example of Spanish Colonial Revival style with some modifications that give it a kinship with Eastern military bases of the same vintage (that were designed in dry formal interpretations of Colonial Revival).

The building is 148'x41 'x37' and contains 18,954 sq. ft. The structure is characterized by the features which define all of the original buildings: the very low pitched, slightly hipped and tiled roofline. Exterior walls are flat and devoid of ornament, save a stringcourse running the entire perimeter of the building and separating the two stories. The eave line is very shallow. Windows are simple, rectangular in plan, vertical in orientation, multi-paned and double hung. Overscaled terra cotta ornamentation define the major front and back entrances, as well as the centered second story window. The main or west-facing entrance projects out from the main structure and exhibits a triple round-arched, recessed entrance.

Ornamental urns, pilasters and floral design (characteristic of Churrigueresque Spanish architecture of the 17th Century) add a much needed ornamental counterpoint to the very simple and severe basic design.

A further feature which distinguishes this structure among all of the others in the original campus plan is the small centered Bell Tower. This small belvedere is capped by a diminutive, red-colored dome and distinguished by very flat arches at each of its four faces. This architectural style is much more characteristic of the colonial designs of the Eastern United States and is a major factor in classifying the overall base design as a modified Spanish Colonial Revival style.

With the nearby Bachelor Officers Quarters and the Married Officers' Residencies, the Administration Building, (which is also historically referred to as the Admirals Quarters) is the most architecturally important building from the original 1933 construction (excluding Hangar #1). This building sets the design criteria that is followed throughout the original campus plan. It acts both as a handsome example of hybrid revivalist architecture which is prominently set at the most important axial juncture of the site and as one of the most lavishly ornamented of Moffett Field's original structures. As such, the Administration Building is a key to the historic fabric of the site.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 9

115557 NPS-94000045-0010 1D

BACHELOR OFFICERS' QUARTERS: BUILDING #20

The site consists of a large, two-storied structure that was constructed on an irregular rectangular shaped site plan which is actually symmetrical in form. The building exhibits a more ornamented interpretation of a hybrid Spanish Colonial Revival architectural design. It is characterized by the same basic features that distinguish all of the original buildings. The roofline is lowpitched and sheathed in red Spanish tile, the eave is fairly shallow, wall surfaces are unadorned white stucco; and window shapes are paired rectangular forms which are double hung, 3 over 2 in form. Major entrances are distinguished by terra cotta facing that emulates granite. Three large round arches provide the building with a very elegant entryway. Flat unadorned pilasters separate these arches. They are further adorned with flat urn detailing. The characteristic stringcourse separates the two floors. A rear wing projects toward the south.

The structure is sited symmetrically across from the equally prominent, but slightly less architecturally impressive, Bachelor Enlisted Quarters (#19) which has been greatly enlarged with a rather bland International Style addition at both ends. The structure is further enhanced by a well conceived and equally well maintained landscape plan.

Along with the cluster of major buildings that are set along the formal axis of North and South Akron Roads, the BOQ helps define the high quality design character that distinguishes the historic core of Moffett Field. The structure is an extremely fine example of historicist architecture of the 1930's and remains a key element in the cohesion of the base's physical form.

115549
GYMNASIUM: BUILDING #2 NPS-94000045-0002 1D

The site consists of a very large, single-story, plaster-sheathed, steel framed building that is constructed on a slightly irregular rectangular floor plan with a flat roof that is distinguished by slightly projecting stepped parapets that hint at the utilitarian designs of the original campus plan of 1933. The roof is wood sheathing on steel beams. This structure exhibits a ubiquitous projecting stringcourse encircling the building, as well as the very plain beige plaster walls. The major design feature on this essentially utilitarian structure is in the window placement. Here, the structure is characterized by very tall, horizontally-banded, multi-paned apertures which act to break up the surface of the exterior walls either as centered indentations on large expansions of plaster or as repeated forms which act almost like columns along the major side elevations.

This structure avoids, as do all of the original functional outbuildings, the Spanish Colonial Revival design of the major living areas of the base. Interestingly, it provides a handsome architectural bridge between the very futuristic Streamline Moderne design of Hangar #1 and the more historicist styles of the original campus plan.

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 7 Page 10

The site is significant both historically and architecturally. It was originally constructed to be a balloon hangar which justifies its extremely large interior single story space (19,691 sq. ft., 130'x88'x63'). Additionally, the building sets the reserved design criteria for the outbuildings on the base which handsomely support their more ornamental Spanish Colonial Revival contemporaries. Features which characterize these original outbuildings include flat roofs, shallow parapets which are slightly stepped; and severely unadorned exterior walls. Windows are rectangular in form and provide the dominant design ornamentation.

Although these buildings do not provide the obvious ornamentation, stylistic historicism or landscaped surroundings of the more apparently significant original Spanish Colonial Revival structures, they exemplify an extremely sophisticated design criteria of their own which greatly adds to the overall cohesion of the existing campus. In their own right, the Gymnasium, along with similarly designed original 1933 outbuildings such as the Garage (buildings #21 and #22), are major factors from the original 1933 design which make NAS Moffett Field so architecturally distinguished.

115560 NPS-94000045-0013 1D

BUILDING #23, INSTRUCTION BUILDING

Fronting on Akron Road, the former dispensary is one of the buildings that defines the original architectural design and is symmetrically placed, opposite building #25, to balance the entrance to the base's formal plan. The two story, above grade, building is basically a "T" form executed with the typical elements of the Spanish Colonial Revival architecture, low pitched tile roof, stucco sheathing and terra-cotta ornamentation. The front facade has a central entrance recessed behind three arched openings that form an arcade. Terra-cotta surrounds decorate the three windows above the entry and the doors at the east and west ends. The building, originally the base dispensary, was enlarged by the U.S. Army's Air Corps in 1936, when extensions were added to the rear and the east end. The building is 105 feet by 96 feet and 10,995 square feet of floor space.

Of the original buildings, #23 and #25 are significant because of their representation of the Spanish Colonial Revival design and for their locations at the entrance of the working station. Opposite each other, across the central lawn mall, these buildings provide symmetry to the original plan.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 11

BUILDING #25 THEATER 115562 NPS-94000045-0015 1D

The theater, two stories over a basement, is a typical example of the significant supporting buildings that define the original architecture. The "T" form is executed with a low pitched tile roof, stucco sheathing and terra-cotta ornamentation. The typical protected entry is behind an arcade that, in this case, is projected forward. The fenestration, again typical of the dominant style, is symmetrical for all floors except those voids above the entrance. Here the pattern changes to a band of windows divided into three elements that balance the three arches of the arcade. The building is 150 feet by 110 feet in an irregular plan that accommodates 7,745 square feet of floor space.

BUILDINGS #21, #22 AND #24 - GARAGES 115558 115559 115561
-0011 -0012 -0014 1D

This group of detached garages are supportive elements in the historic district. Each is one story and is constructed using typical materials and simple forms of the ancillary buildings. Buildings #21 and #22 retain the original use and design, including corner parapets. The buildings, located behind Building #20, are almost identical, 98 feet by 24 feet with garage door openings facing each other. Building #24, located behind Building #23, was the ambulance garage. It is smaller 45 feet by 30 feet. The large garage door openings have been infilled and the interior space modified for administrative offices.

The garages are significant supportive buildings that compliment the architecture of the larger buildings. Building #24 retains the original mass and form but, the alterations have changed its appearance as a garage.

BUILDING #10 - HEAT PLANT 115551 NPS-94000045-0004 1D

One of the original buildings, the heat plant is a large industrial building of block massing in an irregular "T" form that is two stories in height. A single story element fits into the south west corner. Typical of power plant design, the dominate feature is the fenestration. This building has window banks that extend to the second story. A coursing separates the massing with smaller rectangular windows above the band. In keeping with the dominant architecture, this utilitarian building is decorated with a simple surrounds at the entrances. Flat arches top the tall window banks. The glazing is rectangular pane divided mullions. Most of the first floor windows have transoms that are operable. While the upper rows are all operable. A second coursing divides the lower portion of walls at about four feet, the basement line. Building #10, is sheathed in stucco with a flat roof. This building is a handsome version of a utilitarian industrial design.

The heat plant is one of the original buildings. It is significant as an example of the dominate architectural design stripped to the essence, entrance surrounds and arched windows, for industrial use.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 12

STRUCTURE #5 - Water Tower: 115550 NPS-94 000045 - 0003 1D

Supported by a tall steel frame, the water tank is topped with a conical roof. The traditional red and white checkered paint defines this classic industrial design. One of the original structures, the water tower is a functional and visually distinctive feature.

BUILDINGS A THROUGH I AND ANCILLARY GARAGES A-1 THROUGH I-1

REPRESENTATIVE SINGLE FAMILY RESIDENCES (COMMANDING, SENIOR AND JUNIOR MARRIED OFFICERS QUARTERS):

- 115567 The original 1933 detached residential structures are all designed in a like architectural style of
115568 which any single building represents an archetype for the whole. The example used here is site
115569 #A1, which is referred to in the 1933 landscape plan as the "Commanding Officers' Quarters".
115570
115571 The site consists of a very simple, two-storied, rectangular-planned single family residence that
115572 is constructed of wood frame with a low gabled red Spanish tiled roof over a very plain stuccoed
115573 exterior (which is punctuated by a formal placement of both windows and doors). A simple
115574 chimney adorns the western facade. An attached single-storied, round-arched breezeway
115575 connects the residence with a large, two-storied, rectangular-planned garage set slightly behind
115576 the main structure.
115577
115578 Stylistically, the residence reflects all of the specific design criteria which unifies all of the origi-
115579 nal 1933 Spanish Colonial Revival architecture on the base. Windows are almost flush with the
115580 plain exterior walls. They are also essentially rectangular in shape, double hung, multi-paned and
115581 symmetrically placed along the facades. A colored, projecting stringcourse separates the two
115582 stories. The front entry is the most prominent exterior feature with a slightly recessed almost flat
115583 arched entry with projecting surrounds. An ornamental sidelight window is balanced by a large
115584 wrought iron projecting lamp on both sides of the main entrance.

Landscaping is characteristically both formal and very well maintained. The very large mature trees add immeasurably in setting apart the residential quarter as an oasis amid the functioning base. The open greenswards that distinguish the street directly tie in with the more formal axial plan of the rest of the base. The curved street pattern illustrates the influence of contemporary suburban design on such residential planning even on a military base.

The original 1933 detached residences form a key architectural component in the significant whole that distinguishes the site plan of the naval air station. Along with the verdant landscaping and extra wide spacing, this enclave of buildings helps define all that is special about the site from a design perspective.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 13

115555

NPS-94000045 - 0008

1D

CONTROL TOWER: (AEROLOGICAL BUILDING FLIGHT CONTROL TOWER) BUILDING #18

The site consists of a moderately-sized (3590 sq. ft.), two-storied building with a centered third story, hexagonal-shaped Control Tower. The structure is designed on a slightly varied rectangular floor plan with a very minimal attempt at exterior ornamentation. It is another of the utilitarian structures from the original plan that exhibits hints of the Spanish Colonial Revival design of the major buildings (in the centered round arch, the overscaled twin wrought iron Spanish styled lamps on both sides of the entry and the ubiquitous terra cotta surrounds ornamenting the front door). Otherwise, this structure is very simple in its design. Its walls are unadorned plaster. Windows are slightly recessed, rectangular in plan, multi-paned, double hung and symmetrically placed along the exterior facade.

The hexagonal tower is, along with the projecting metal tower above, the most distinguishing feature of the structure. It is characterized by its band of vertically oriented windows on each of the eight faces, as well as the iron railing which caps the flat-roofed tower from above.

The building's significance is due both to its history as the original Control Tower for the air station, as well as to its architectural design which once again exemplifies the sophisticated aspects of the original 1933 plan. The structure provides a transition between the more historically refined Spanish Colonial Revival architecture and the simple, yet equally impressive, more modern styles of the utilitarian outbuildings. It is the cohesion provided by the interaction between these two styles that provide the stylistic excellence of the historic core plan.

115564
- 0017115565
- 0018

1B

TWIN SMALL TOWERS (FLOOR WATCHTOWERS): BUILDINGS #32 AND #33

These two twin sites (#32 and #33) consist of very small, two-storied towers that are distinguished by their very unusual design. They are towers that are distinguished by their very unusual design. They are very small structures (578 sq. ft., 14'x14'x25') that appear to be composed of a standard two-story rectangular tower with flat roof joined to a slightly smaller two-storied rounded tower with like flat roof that is capped with metal railing. The buildings are very simple in form. There are really no specific architectural embellishments. They exhibit all of the standard features of the utilitarian structures on the base without any ornament. Recessed, double-hung, multi-paned windows provide the major characteristic design feature which ties them into the surrounding historic core buildings. A prominent projecting stringcourse characteristically separates the two floors.

The significance of these two small utilitarian buildings is primarily in their unique function and form. They are very site specific and add a distinctive counterpoint to all of the rectangular shaped structures on the base. They are architectural curiosities that add immeasurably to the historic and architectural importance of the site.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 14

INTERIOR SPACES:

Naval Air Station Moffett Field has been in continuous use since it was constructed. During the years the interiors of the buildings were altered to accommodate changes in uses and space requirements. The alterations have redesigned the original interior space plans, removed the original surfaces and changed the spacial feeling of the interiors. Due to the alterations, the interiors do not retain architectural integrity or historic significance.

NON-CONTRIBUTING BUILDINGS

Within the boundary of the historic district the number of non-contributing buildings exceeds the number of significant buildings and structures. This unusual ratio does not diminish the significance or integrity of the district. Most of the non-contributing buildings were constructed after the period of significance and are primarily small utilitarian constructions. The Chapel and heating plant, buildings 86 & 87 were constructed after the period of significance yet are designed in the idiom of the district. Thus, Naval Air Station Moffett Field, despite the imbalance in numbers of contributing and non-contributing buildings, maintains exceptional integrity of the 1933 station plan and architectural design.

The International style buildings were predominately constructed after 1944 and are not 50 years old. Therefore, they are not eligible for listing at this time. The Post Office, building #67, constructed in 1943, one of the finest examples of this style, is not significant as an individual building and should be included with the later International style buildings.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 15

9-9400045-

SIGNIFICANT AND CONTRIBUTING BUILDINGS

BLDG. #	CURRENT USE	ORIGINAL USE
1D 1 115548	Hangar #1	Hangar #1
2 " 2 115549	Gymnasium	Balloon Hangar
3 " 5 115550	Water Tank	Water Tank
4 " 10 115551	Heat Plant Building	Storehouse
5 " 15 115552	PW Shop	Fire Station/Laundry/Garage
6 " 16 115553	PW Shop	Locomotive Crane Shed
7 " 17 115554	CPWP Administration	Administrative Building
8 " 18 115555	NAV RES Administration	Aereological Center
9 " 19 115556	BEQ	BEQ/Brig
10 " 20 115557	BOQ	BOQ/Mess Hall & Galley
11 " 21 115558	BOQ Detached Garage	BOQ Detached Garage
12 " 22 115559	BOQ Detached Garage	BOQ Detached Garage
13 23 115560	Instruction Building	Dispensary E
14 24 115561	Administrative Office Building	Ambulance Garage
15 25 115562	Base Theater/Recreation Service/Thrift Shop	Bowling Alley/Recreation Building
16 26 115563	Gate House/Iron Fence	Gate House/Iron Fence
17 32 115564	Storage	Tank House
18 33 115565	Storage	Water Tower
19 37 115566	Scale House	Scale House
20 21 A, A1 115567, 115568	Officers Housing and Garages	Housing and Garages
21 23 B, B1 115569, 115570		
22 25 C, C1 115571, 115572		
23 27 D, D1 115573, 115574		
24 29 E, E1 115575, 115576		
25 31 F, F1 115577, 115578		
26 33 G, G1 115579, 115580		
27 35 H, H1 115581, 115582		
28 37 I, I1 115583, 115584		
29 46 115585	Hangar #2	Hangar #2
30 47 115587	Hangar #3	Hangar #3
31 55 115588	Heat Plant for Hangars #2 and 3	Heat Plant for Hangars #2 and #3

SIGNIFICANT OBJECTS

41 40 115589	Flagstaff/Commons	Flagstaff and Commons
42 115590	Memorial Anchor	Anchor

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 7 Page 16

NR-9400045-

6X3

0043 115591

0044 115593

0045 115594

0046 115595

0047 115596

0048 115597

0049 115598 1930-1933 - Altered (loss of architectural integrity): Buildings #3, #6, #12, #13, #14, ✓

0050 115599 #29, #31, #36, #501:

0051 115600

0052 115601 1940-1944 - Altered (loss of architectural integrity): Buildings #240, #241, #242, #514, ✓

0053 115602 #515, #516, #517

0054 115603

0055 115604 Assembly Buildings: #45, #85, #115 ✓ ✓ ✓

0056 115605

0057 115606 Quonsets: #81, #117 ✓ ✓

0058 115607

0059 115608 Sheds: #34, #44, #83, #347 ✓ ✓ ✓ ✓

0060 115609

0061 115610 1940 - 1944 (outside period of Significance) Buildings: #67, #64, #86, #87, ✓ ✓ ✓ ✓

0062 115611

0063 115613 All buildings and structures constructed after 1944, including: #76, #77, #123. ✓ ✓ ✓

0064 115614

0065 115615 All ancillary buildings and structures, in proximity to Hangars #2 and #3, that are very
0066 115617 small, altered or constructed after 1944; #79, #98, #186, #346, #350, #367, #368, #396,

0067 115619 #440, #470, #472, #499, #539, #540.

0068 115618

0069 115619

0070 115620

0071 115621

0072 115622

0073 115623

0074 115624

0075 115625

0076 115626

0077 115627

0078 115628

0079 115629

0080 115630

0081 115631

0082 115632

0083 115633

0084 115634

0085 115635

0086 115636

0087 115637

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 2

Several factors contributed to the commissioning of the U.S. Naval Air Station Sunnyvale on April 8, 1933. Of foremost importance was the vision for the future of aircraft and influence of Admiral William A. Moffett. Appointed by President Harding on July 25, 1924, to be the first as Chief of the Naval Bureau of Aeronautics, Admiral Moffett had already established himself the proponent for increased Naval aircraft as an integral component of the Navy's ability to control the seas off the coasts of the United States. In the 12 years that Admiral Moffett lead the bureau, the U.S. Navy was catapulted into the lasting interlocking strategy of Naval presence in the air as well as the sea. But he also spoke of the future in commercial aviation. In the 1920's, he appears fascinated with the lighter than air technology of the dirigibles. The success of the zeppelins in WWI contributed to the development of the larger dirigibles. This was however, marred by the disasters resulting from the flammability of the hydrogen used to fill the chambers. Each country involved in the hydrogen filled dirigibles experienced tragedy. A memorial plaque in Shenandoah Plaza at Moffett Field commemorates USS SHENANDOAH that was lost with a crew of 14 on September 3, 1925. The largest of the dirigibles, HINDENBERG, burst into flames over Lakehurst, New Jersey in 1937, culminating a series of tragic losses involving the dirigibles and hydrogen. Helium, produced only in Texas and Kansas, had been known to be a reasonable replacement for hydrogen, but was prevented from export by the 1925 Helium Export Act. Moffett began a lobbying campaign to have the U.S. Navy use helium filled dirigibles to patrol the coasts. In Moffett's plan, these giant rigid frame airships would provide the long range observation for the surface Navy below. He believed the dirigibles could be fashioned to carry small planes and might even be equipped with bombs. The idea was not far-fetched. The technology of the 1920's allowed dirigibles which could stay aloft for 14 days and fly 10,000 miles. The lobbying proved successful with the 1926 congressional authorization for two Naval dirigibles capable of carrying aircraft and a new aircraft base for the west coast. The dirigibles were to be built by the Goodyear-Zeppelin Corporation in Akron, Ohio. The first to be completed was based at Lakehurst, New Jersey. The selection of the site and construction of a base to service the second would be undertaken on the west coast.

The west coast site appeared to be slated for Camp Kerney near San Diego when the northern California politicians realized the opportunities to be created and forced the federal planners to accept applications from the entire west coast. Applications were received from 997 locations. San Francisco mayor, James Rolph, saw the benefit to the Bay Area even though his city did not have a site suitable for the base. The appeal was for 2,000 acres with unobstructed approaches, clean water, rail access and good flying weather was heard by Mrs. Laura Whipple, a recently established real estate broker from the East Bay. Familiar with the Sunnyvale area, she selected the Rancho Unigo, a former Indian Reservation, that seemed to meet all the criteria. Appointing herself "Chairman of the Landholders Commission", she obtained an option for 1,750 acres at the price of nearly \$500,000. She wired San Jose congressman, Joseph Free, that a perfect site for the dirigible base had been located and optioned. The proposal from San Diego offered free land; in order for the Sunnyvale site to be selected the same offer would have to be made. Under

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section number 8 Page 3

the leadership of presidents of the Chambers of Commerce from Mt. View and San Jose, a campaign to raise the funds and solidify the offer went forward. The newspapers, including the San Jose Mercury Herald, were enthusiastically in support of the proposal and offered publicity and public relations material to support the proposal. After three years of study and debate, it was time for a decision. On December 28, 1930, the vote registered by the House Naval Affairs Committee for H.R. 6810, introduced by Congressman Free, selected Sunnyvale by 18 to 1 and Camp Kerney as the auxiliary base. As a member of the West Coast Naval Airship Base Board, Moffett had favored Sunnyvale while the Secretary of the Navy, Charles F. Adams, preferred Camp Kerney.

Once selected, the issue remained to raise the money to purchase the land. Under the leadership of A. M. Mortensen, President of the San Jose Chamber of Commerce, the funds were raised and on August 2, 1931, the Chamber's check for \$476,165.90 completed the purchase of 1000 acres of the Rancho Unigo. Also on August 2, 1931, the land was transferred to the U.S. Navy for \$1.00. This completed a long and arduous partnership between the cities of the Bay Area to gain the prestige, jobs and economic interests that would follow the base.

The budget for constructing the base was \$5,000,000. The U.S. Navy of Yards and Docks would be responsible for the design and coordinate the construction. Lt. Commander Earl Marshall was given the responsibility. Ernest Wolf, an experienced engineer from the Goodrich Zeppelin Corporation, was to be the Associate Engineer. Hangar #1, as it would be called, was the most important building and received the first attention. The design had been refined in Akron by Dr. Hugo Ekener, to form a rounded building that followed the form of the dirigible. Enormous curved doors on each end would slide over the building, rolling on 40 wheels over standard gauge railroad track, and propelled by 150 hp electric motors, thus minimizing the turbulence and problems encountered with past designs. In fact, it was the window patterns that dictated the north-south orientation and siting of Hangar #1; the rest of the base followed. Of the \$2,250,000 budgeted for the hangar, \$1,116,044 was awarded to the Wallace Bridge and Structural Steel Company of Seattle to fabricate the steel for the structure and doors. Seims-Heimers, Inc. of San Francisco bid \$398,937 for the roofing, windows and siding on the airdock that would measure 1,133 feet long, 308 feet wide and 198 feet high. The floor area is just over eight acres. A structural space frame, the design and construction of this hangar remain a feat unparalleled in the engineering of enclosed space.

Railroad tracks ran through the hangar, culminating at the mooring tower. The tower secured the dirigible to the ground by mooring lines. This tower has been removed. The other large structure that was necessary for the dirigible was the helium tank that was located in front of the hangar.

The plan for the base and the design of the buildings was also undertaken by the Naval Bureau of Yards and Docks.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 4

The style for the buildings, Spanish Colonial Revival, is reflective of the popularity of the revival movement and the desire of the local politicians to have the base designed in the "California Style" of white stucco walled buildings with red tile roofs. The plan and building design was very formal, an axial orientation with the hangar to the east and the base extending west. Following the Spanish influence, a large plaza is the central element with the most ornately decorated building, the Administration Building, at the head of the plaza behind the flag pole and in front of the hangar. On the south side of the plaza were located the dispensary and Bachelor Officers' Quarters. To the north were the recreation building and the barracks. To the southwest on the cul-de-sac were located the nine officers' houses and garages. Extending to the east, and south, behind this formal plaza arrangement were the utilitarian buildings, fire station, garage, laundry boiler plant, locomotive and crane shed, shops, helium storage and water tower. To the north were the commissary, store house, gas station, balloon shed and storage buildings. Directly behind the Administration Building was the cafe (later the Officers' Club), and of course, the Hangar. The base was designed in anticipation of the importance of the automobile. Broad roads, large parking areas and garages were incorporated in the plan.

Landscaping was carefully planned to mature in harmony with the buildings and circulation elements. The area considered the Naval Air Station Sunnyvale Historic District maintain the integrity of the original design and represent one of the finest formal plans for a government facility in California. It was a forward-thinking plan with expansion to occur outside the formal plaza, thus the quality of design has been maintained. The original base is a one-of-a-kind facility in the Santa Clara Valley with great importance in the architectural heritage, facility planning and economic growth of the region.

The primary significance of the historic district is the association with the "lighter than air" dirigible program. The dirigibles, to be the eyes in the sky for the Navy, were in operation for a relatively short time. USS MACON, one of the two dirigibles constructed for the Navy, was christened by Mrs. William Adger Moffett (wife of Admiral Moffett) on March 11, 1933. An article about the landing in Sunnyvale was reported in the October 15, 1933 edition of the San Francisco Chronicle that read, "30,000 Thrilled as the MACON Moors at Home Station." The sister dirigible, AKRON, had been lost on April 13, 1933, making the MACON the last dirigible. For 16 months, USS MACON was a common sight over the Santa Clara Valley as it performed in a number of military maneuvers with the Pacific Fleet. Admiral Moffett had been well aware that the slow moving dirigibles could be of great benefit when assigned as an observatory for the fleet, but were vulnerable if used in maneuvers with the fleet. Shortly after arriving at Sunnyvale, USS MACON was deployed on tactical maneuvers with the Pacific Fleet. Equipped with an internal hangar and steel frame hoist termed a "trapeze", USS MACON carried four small fighter planes. The Sparrowhawks (F9C) were bi-plane fighters developed specifically to be carried in the dirigible by Curtis. Each weighed only 2,500 pounds with a pilot. As an airborne carrier, the dirigible was a hulking target that "failed to demonstrate military usefulness," according to the Commander in Chief of the United States Fleet, Admiral David Sellers. While returning from maneuvers with the fleet on February 12, 1935, USS MACON experienced a structural failure and crashed into the Pacific. Of the 83 crew, only 2 were lost. It was the headline in the San Francisco Chronicle the next day that told the story, "Dirigible Doomed as Defense Factor, Officials Say." The era of dirigibles was over, the only remaining element of the Moffett five year plan was Hangar #1 and the base at Sunnyvale.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 5

During this period, the U.S. Army Air Corps operated a limited number of blimps in conjunction with observation exercises. In September, 1935, seven months after USS MACON went down, the Army assumed control of the base and Hangar #1. The facility was used by the Army for pursuit and observation activities until 1940 when it was converted to the West Coast Air Corps Training Facility. During this period, the dispensary was enlarged and barracks were added.

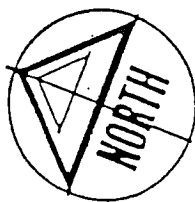
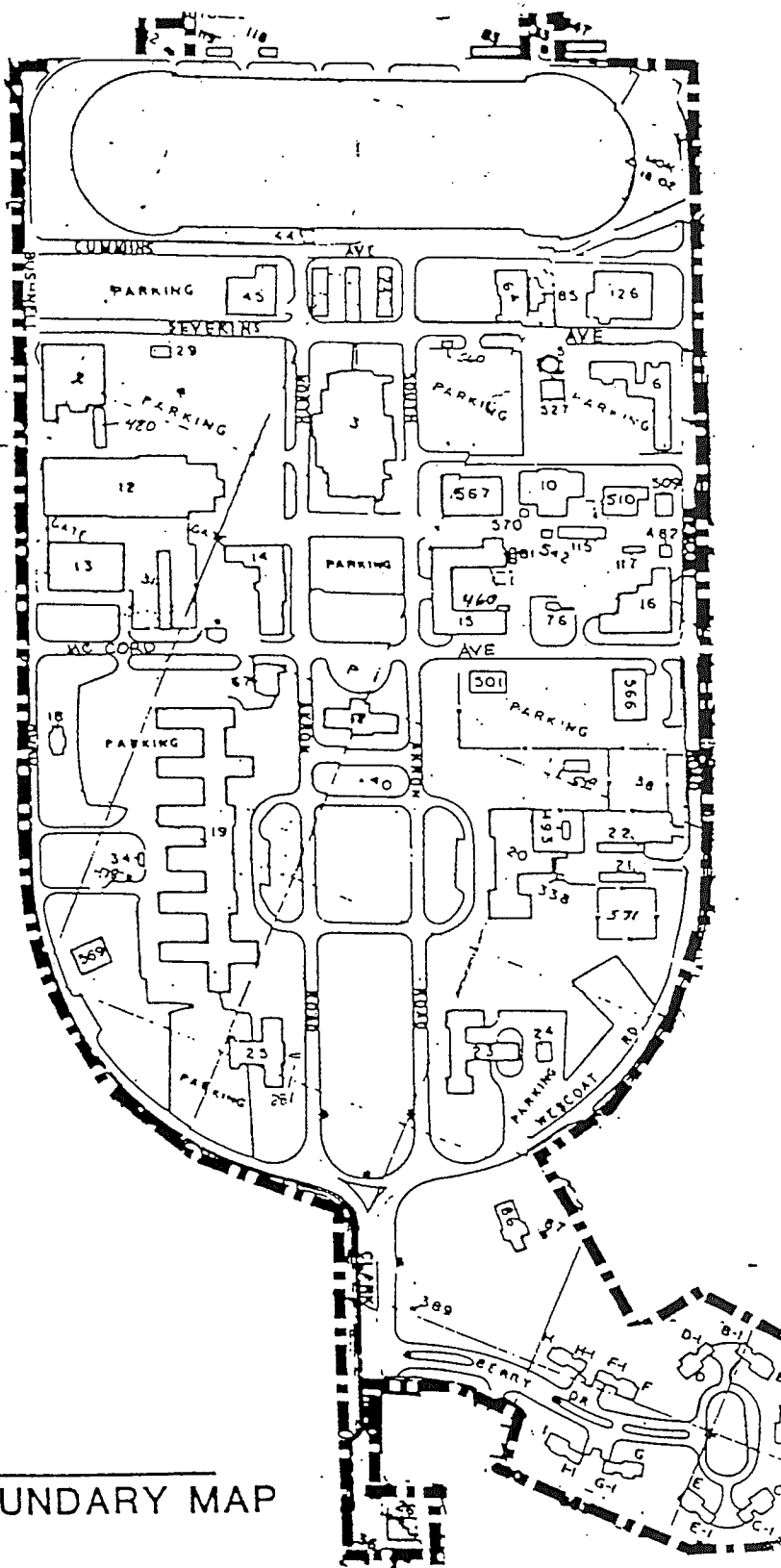
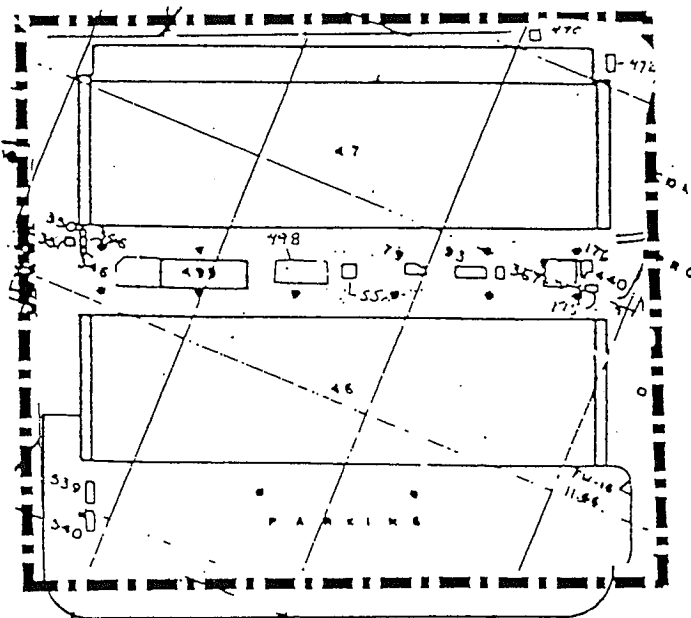
Shortly after the outbreak of WWII, the base was returned to the U.S. Navy. In April, 1942, the base was recommissioned Naval Air Station Moffett Field.

The return to Naval Command was to provide expanded facilities for small blimps and balloons used for coastal observation. Hangars #2 and #3 were constructed for blimps in 1942. They are included in the historic district because of the use as a lighter than air facility, and for their architectural/engineering importance.

One of the most recognizable landmarks in the San Francisco Bay Area, Hangar #1 and the original base are significant in the history of Naval Aviation, defense and in the development of the Santa Clara Valley. From the original base and because of the facility location and landing field, NASA Ames Research Center is located to the north adjacent to the original plaza boundary and at the north boundary of the historic district. It is far easier to measure the importance of the dirigible in Naval Aviation and defense history than it is to measure the enormous impact upon the growth of the defense and space industry in Northern California because of the original location of this base with the 1000+ acres.

The Naval Air Station Sunnyvale Historic District is recommended for listing in the National Register of Historic Places at the National Level of significance under Criteria A, as the only base designed specifically for the Navy to home port USS MACON, the only dirigible in the fleet, a significant contribution to the broad pattern of our history; and under Criteria C, a facility plan and architectural design that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The landscape plan (Y&D drawing No. 115840) was approved on April 29, 1933. This plan shows the base in its entirety.



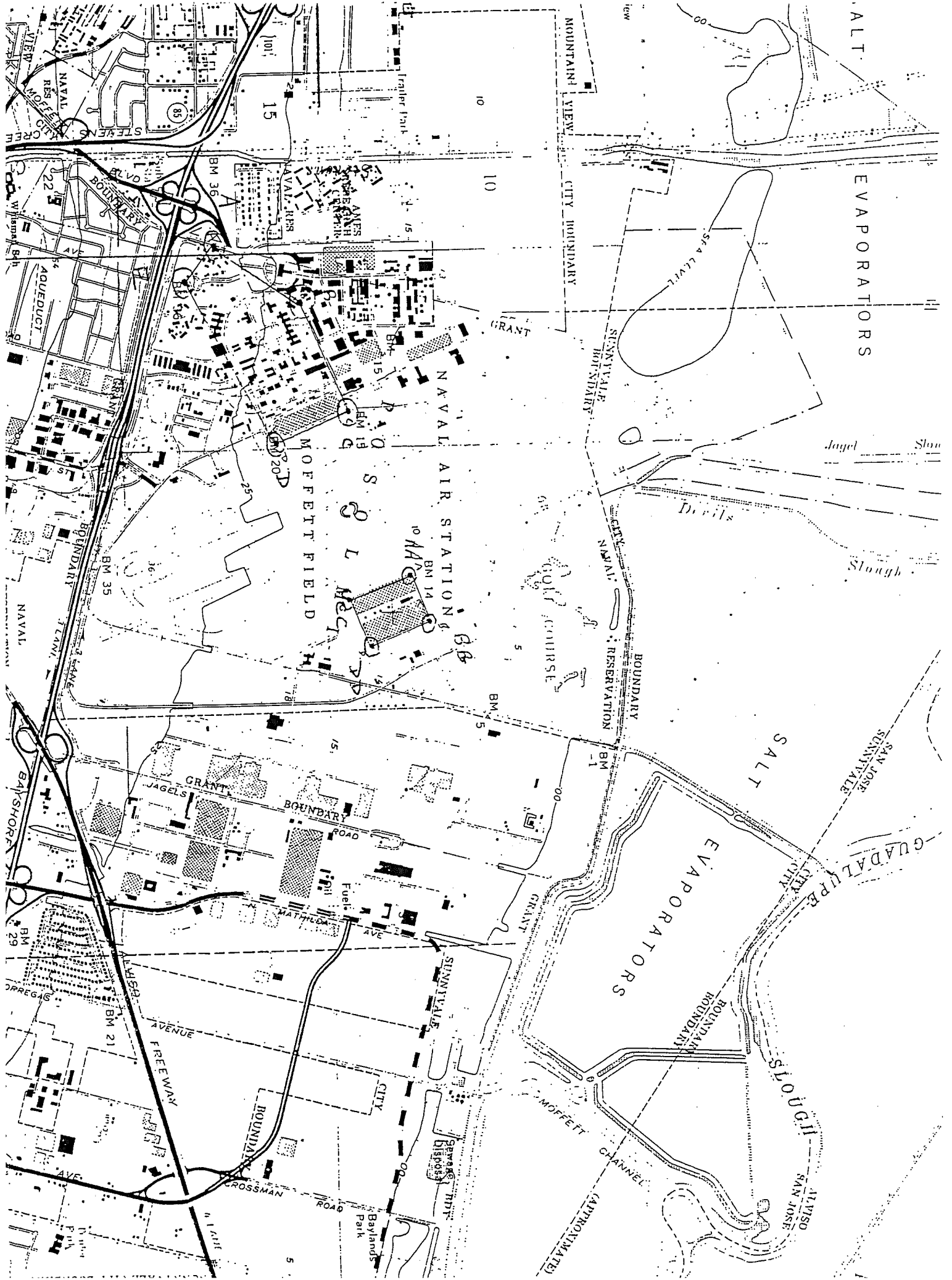
DISTRICT BOUNDARY MAP

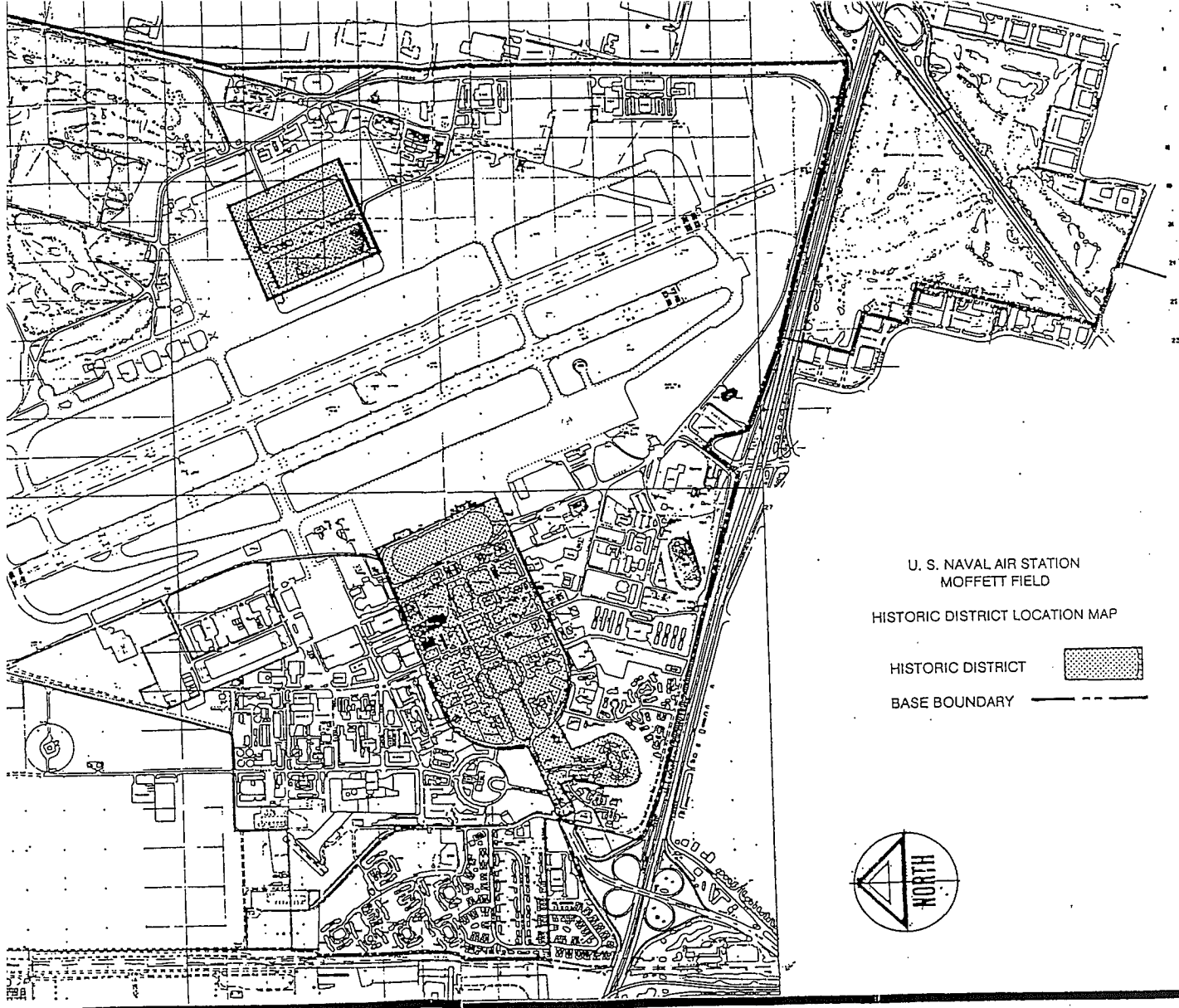
United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 10 Page 2


ZONE 10	E	37.7063	122.0530
	A1	37.7095	122.0433
	B1	37.7060	122.0421
	C1	37.7071	122.0394
	D1	37.7105	122.0408




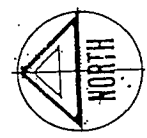


U. S. NAVAL AIR STATION
MOFFETT FIELD

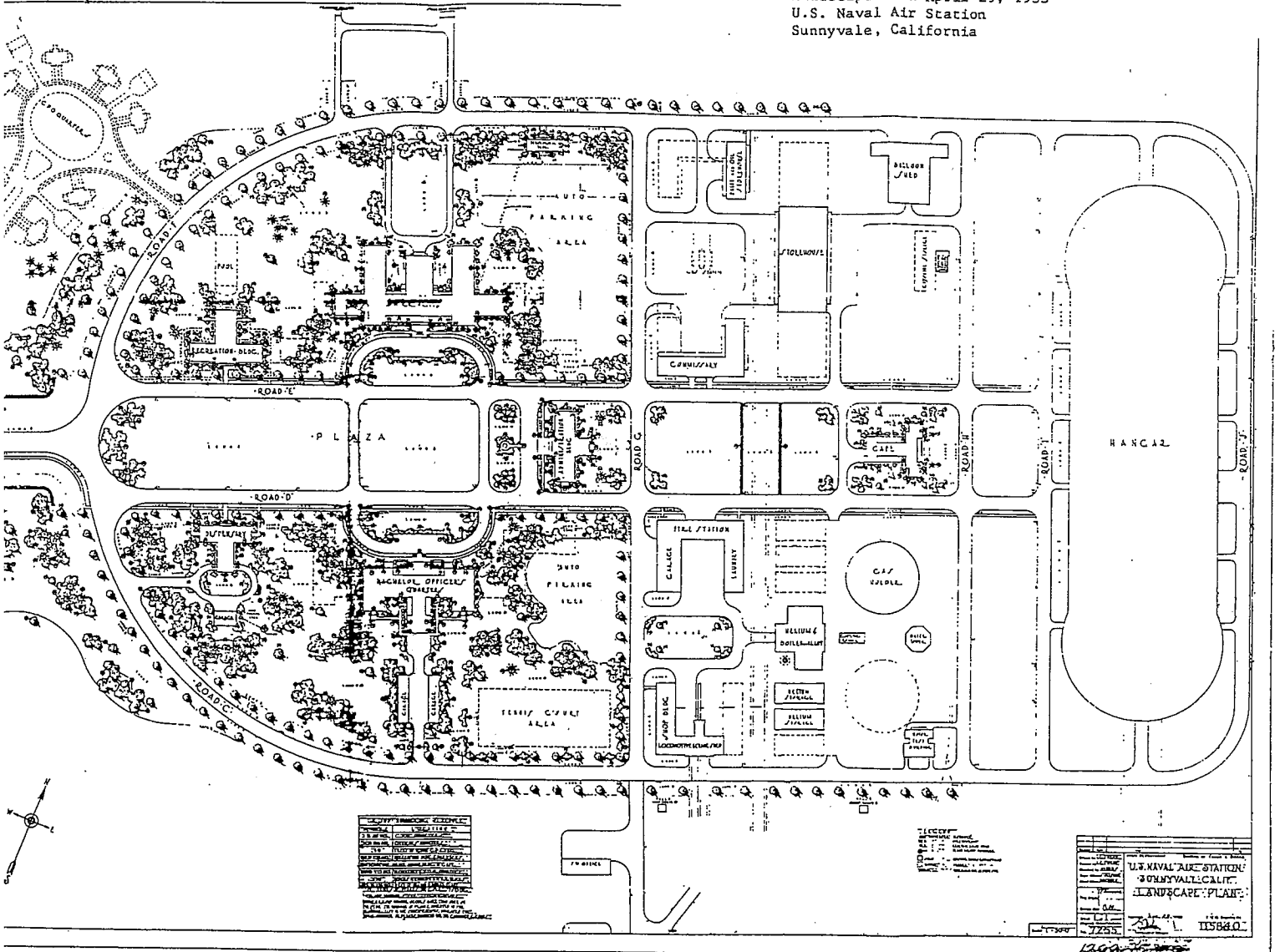
HISTORIC DISTRICT LOCATION MAP

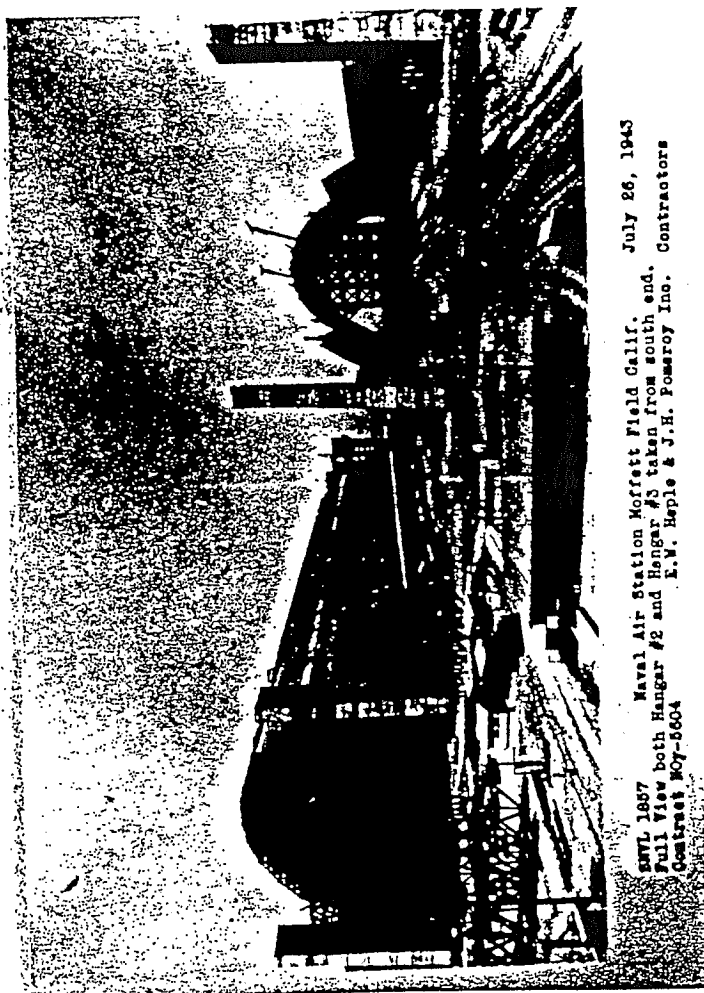
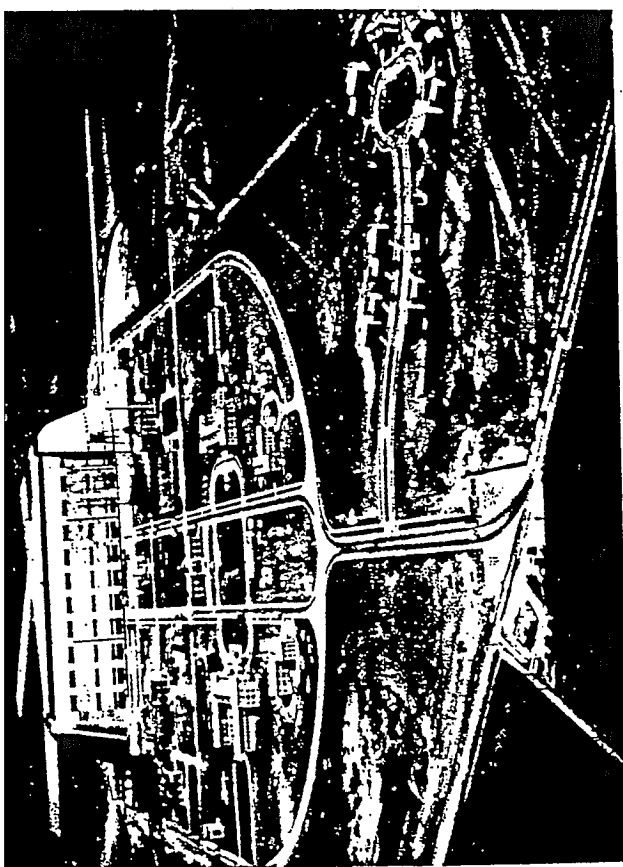
HISTORIC DISTRICT 

BASE BOUNDARY 



Navy Department-Bureau of Yards and Docks
Landscape Plan April 29, 1933
U.S. Naval Air Station
Sunnyvale, California





SWL 1857 Naval Air Station Moffett Field Calif. July 26, 1943
 Full View both Hangar #2 and Hangar #3 taken from south end. Contractors
 E.N. Heple & J.H. Fomeroy Inc. Contract W-5604

